

**UNCLASSIFIED**

EXHIBIT R-2, RDT&E Budget Item Justification						DATE: February 2004			
APPROPRIATION/BUDGET ACTIVITY RDT&E, N /BA-7 Operational Sys Dev		PROGRAM ELEMENT (PE) NAME AND NO. 0206313M Marine Corps Communications Sys							
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Total PE Cost	197.524	247.179	268.638	219.349	221.868	108.399	89.479	Cont	Cont
C2270 Command Post Systems	39.487	9.064	10.727	12.308	9.932	8.792	9.248	Cont	Cont
C2272 Intelligence C2 Systems	24.129	17.759	32.294	27.668	20.964	17.441	15.566	Cont	Cont
C2273 Air Operations C2 Systems	62.275	94.832	99.834	81.526	105.786	31.135	19.923	Cont	Cont
C2274 Warfare Systems	8.142	12.965	8.136	5.437	4.527	4.222	4.608	Cont	Cont
C2275 Radio Systems	0.565	8.772	8.670	4.865	4.328	4.222	3.550	Cont	Cont
C2276 Communications Switching & Control Systems	2.773	6.449	3.803	4.663	3.913	4.039	3.430	Cont	Cont
C2277 System Engineering & Integration	8.918	8.762	7.960	9.567	8.744	9.030	9.204	Cont	Cont
C2278 Air Defense Weapons Systems	23.238	23.338	22.765	6.429	11.075	10.537	5.798	Cont	Cont
C2315 Training Devices/Simulators	7.277	12.278	4.863	8.267	5.634	4.284	4.443	Cont	Cont
C2510 MAGTF CSSE & SE	3.215	22.238	18.034	10.611	8.123	8.598	8.633	Cont	Cont
C3099 Radar Systems	0.000	20.141	51.552	48.008	38.842	6.099	5.076	Cont	Cont
C9273 Defense Emergency Response Fund (DERF)	10.640	0.149	0.000	0.000	0.000	0.000	0.000	Cont	Cont
C9276 Radar and Marine Corps Ship Maneuver	6.865	10.432	0.000	0.000	0.000	0.000	0.000	0.000	17.297
Quantity of RDT&E Articles									

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EXHIBIT R-2, RDT&E Budget Item Justification

DATE:

**February 2004**

APPROPRIATION/BUDGET ACTIVITY  
**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT (PE) NAME AND NO.  
**0206313M Marine Corps Communications Sys**

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

This program element provides funding to develop the command and control (C2) support and information infrastructures for the Fleet Marine Force and supporting establishment. Doctrinally, the C2 support system and the information infrastructure form two parts of a triad of capabilities which permits command and control systems to be transformed into a complete operating system. The third element of the triad is command and control organization and is not covered in this program element. USMC command and control is divided into seven functional areas and one supporting functional area as follows: intelligence C2, fire support C2, air operations C2, radio systems C2, combat service support C2, warfare C2, radar systems C2, and C2 support (information processing and communications).

Within this program element, subprojects have been grouped by C2 functional area for more efficient planning. Air defense weapons systems have been added to facilitate planning and a separate project is used for systems assigned to the supporting establishment. Subprojects which support the commander's decision processes have been collected into the Command Post Systems project since these systems must work in close cooperation to ensure effective C2 of Marine Air Ground Task Forces.

This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for upgrade of existing, operational systems.

**B. PROGRAM CHANGE SUMMARY**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>
<b>(U) FY 2003 President's Budget:</b>	196.004	235.722	267.268
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases	1.400	13.950	
(U) Reprogrammings	3.794	-1.000	13.580
(U) SBIR/STTR Transfer	-3.674		
(U) Minor Affordability Adjustment		-1.493	-12.210
<b>(U) FY 2004 Presidential Budget:</b>	197.524	247.179	268.638

CHANGE SUMMARY EXPLANATION:

- (U) Funding: See Above.
- (U) Schedule: Not Applicable.
- (U) Technical: Not Applicable.

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EXHIBIT R-2a, RDT&E Project Justification							DATE: <b>February 2004</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Sys</b>					PROJECT NUMBER AND NAME <b>C2270 Command Post Systems</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	<b>39.487</b>	<b>9.064</b>	<b>10.727</b>	<b>12.308</b>	<b>9.932</b>	<b>8.792</b>	<b>9.248</b>	<b>Cont</b>	<b>Cont</b>
RDT&E Articles Qty									
<b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>									
<p>(U) Systems assigned to this project are to be used by commanders and their staffs to process, fuse, and tailor information to assist decision-making and enhance situational awareness. They will integrate and share information from sources both internal and external to the Marine Air-Ground Task Force (MAGTF) to provide a shared understanding of the battlespace. Maneuver C2 is the executive layer of decision support that retrieves and fuses information from functional areas. It provides an integrated representation of the battlespace or a specific area of concern. The subprojects below develop systems that report unit status and location to the Tactical Combat Operations (TCO) System, and disseminate maneuver information throughout the battlespace.</p> <p>1. MAGTF Software Baseline (MSBL). MAGTF Software Baseline (MSBL) is an evolutionary software acquisition program that provides common software functionality to enhance and improve the capability and interoperability between multiple Marine Corps MAGTF C4ISR systems. The common software functionality provides the warfighter situational awareness and allows the Commander to successfully operate in a joint/combined environment. This common software functionality is accomplished through two separate but interrelated baselines software development efforts. The Common Operating Environment (COE) Unix baseline, which supports Unix based server systems and the Command and Control Personal Computer (C2PC) baseline which supports Windows based tactical workstations/systems used at the company and above levels. A "light" version of C2PC is being developed for tactical workstations/systems used at the platoon and below level.</p> <p>2. The Tactical Command Operations (TCO) will provide systems to the command post which support Maneuver C2. Maneuver C2 is the executive layer of decision support that pulls and fuses information from other functional areas.</p> <p>3. The Intelligence Analysis System (IAS) supports the employment of reconnaissance, surveillance, and target acquisition resources and the timely planning and processing of all-source intelligence; it ensures that tactical intelligence is tailored to meet specific mission requirements. A Marine Expeditionary Force (MEF) IAS variant will also process signal intelligence. Funding for this program has moved to Project C2272 within this Program Element (PE).</p> <p>4. Advanced Field Artillery Tactical Data System (AFATDS) will consist of fire support command and control software fielded on Marine Corps common hardware. AFATDS will provide the MAGTF with an automated ability to rapidly integrate all supporting arm assets into maneuver plans.</p> <p>5. The Unit Operations Center (UOC) development efforts focus on: Cognitive Task Analysis (CTA); enhanced ergonomic physical design; evaluation of advanced multimedia hardware; integration and networking with advanced development communication systems; and battlefield visualization concepts. Unit Operations Center (UOC) will provide a facility and components for the integration of current and planned battlefield automation systems. UOC is a "system of systems" designed to optimize the positioning, interaction, and flow of information among the various staff agencies (G-2, G-3, Operations Directorate, etc) and their automated information systems and between higher, adjacent or subordinate units or headquarters. The Marine Corps deploys Component/Joint Task Force (JTF/Marine Air Ground Task Force (MAGTF) command elements throughout the world to fulfill operational requirements, often in joint/combined forces arenas. The UOC is designed in garrison and tactical versions. The tactical version is called the Combat Operations Center (COC), which is an outgrowth of the integrated COC (ICOC), COC-Interim (COC(I)), and the Enhanced COC (ECOC) developments over the last two years.</p> <p>6. GCCS Integrated Imagery and Intelligence (GCCS-I<sup>3</sup>) is a joint program that is designed to enhance the operational commanders' situation awareness and track management through the use of a standard set of integrated, linked tools, and services that maximize commonality and interoperability across the tactical, theater, and national communities. GCCS-I<sup>3</sup> operates in joint and service specific battlespace and is interoperable, transportable, and compliant with the DoD mandated Common Operating Environment (COE).</p>									

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Sys</b>	PROJECT NUMBER AND NAME <b>C2270 Command Post Systems</b>	
<p>7. The Data Automated Communications Terminal (DACT) will extend situational awareness to echelons below the battalion level within the Marine Corps. The DACT will receive, store, retrieve, create, modify, transmit and display map overlays, operational messages/reports, and position information via tactical radios, networks, and/or wire lines. A phased approach for full functionality fielding consists of hardware/software upgrades and enhancements that allow interoperability with other C4I systems.</p> <p>8. Marine Corps Training, Exercise, and Employment Plan (MCTEEP) is a Windows-based, Marine Corps developed scheduling tool, identified in the Commandant's Planning Guidance (CPG) to standardize the "TEEP" process. MCTEEP software was first fielded in July 1995 to every G-3/S-3 in the operating forces. Funding for this program has moved to Project C2906 within this PE in FY04 and beyond.</p> <p>9. Single Integrated Air Picture (SIAP) is the product of fused, common, continual, coherent, unambiguous tracks of airborne objects of interest within the surveillance area. The SIAP Systems Engineer Task Force is an ad hoc Joint effort to investigate, research and produce the most common effective means for producing a SIAP. Funding for this program has been moved to Project C2273 in FY04 and beyond.</p> <p>10. Target Location Designation and Hand-Off System (TLDHS) - Provides fire support observers/controllers (OCs) with the ability to: observe their area of interest, quickly and accurately locate ground targets, and digitally request and coordinate target engagements by field artillery (FA), close air support (CAS), and naval surface fire support (NSFS). TLDHS will also provide the capability to designate targets for laser-guided munitions and laser spot trackers. TLDHS is comprised of and integrates two major subsystems: the Targeting Subsystem and the Target Hand-Off Subsystem. USMC MS III for TLDHS was 2Q03.</p>			
<b>(U) B. ACCOMPLISHMENTS/ PLANNED PROGRAM:</b>			
TCO: Program management and engineering support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.005</b>	<b>0.160</b>	<b>0.254</b>
RDT&E Articles Qty			
TCO: Server testing and integration to develop additional functional capabilities.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.058</b>	<b>0.180</b>	<b>0.244</b>
RDT&E Articles Qty			
TCO: Integrate software changes into new system and perform testing.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.125</b>	<b>0.215</b>
RDT&E Articles Qty			
TCO: Testing and validations of advanced concepts and technologies.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.327</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
IAS MOD: Critical improvements to GCCS-I3 Intelligence Support software for USMC requirements.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.130</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
IAS MOD: Software modifications to support USMC joint interoperability.			

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>		<b>C2270 Command Post Systems</b>	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.474</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>IAS MOD:</b> Performed IOS Client Hardware Trade Study.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>1.247</b>	<b>1.200</b>	<b>1.300</b>	
RDT&E Articles Qty				
<b>MAGTF C4I BASELINE:</b> Build, test, field and support COE compliant versions of GCCS-J in support of the six Warfighting functions. This effort focuses primarily on the integration, inclusion and incorporation of Fire Support, Maneuver and Intel capabilities.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.466</b>	<b>0.525</b>	<b>0.622</b>	
RDT&E Articles Qty				
<b>MAGTF C4I BASELINE:</b> Program Management Support.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.365</b>	<b>0.390</b>	<b>0.390</b>	
RDT&E Articles Qty				
<b>MAGTF C4I BASELINE:</b> Conduct disciplined risk management, requirements tracking and systems engineering and analysis efforts.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>3.147</b>	<b>2.916</b>	<b>1.941</b>	
RDT&E Articles Qty				
<b>MAGTF C4I BASELINE:</b> Development of MSBL Client in MS Windows environment (C2PC).				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.408</b>	<b>0.900</b>	<b>1.200</b>	
RDT&E Articles Qty				
<b>MAGTF C4I BASELINE:</b> Development of client for foot mobile Marines in Windows CE environment per user requested improvements.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.029</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>AFATDS:</b> Final development and testing of AFATDS V6.3.2 software. Developed increased interoperability with all other MAGTF C4I automated systems. Increased software effectiveness with, and in support of Marine Corps fire support systems.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>1.612</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>AFATDS:</b> Developed AFATDS V7 software. Simplified human factors interface to allow easier initial and sustainment training. Increased functionality with Marine Corps fire support systems (including Towed Artillery Digitization.) Enhanced air mission processing capabilities of system. Further enhanced human factors interface to provide simple and familiar view to users. Developed better interface with GDU on M198.				

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>		PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Sys</b>	PROJECT NUMBER AND NAME <b>C2270 Command Post Systems</b>
<p align="center">February 2004</p>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.925</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>AFATDS:</b> Field Integration Team (FIT) testing, software development, and FMF interoperability support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.153</b>	<b>0.558</b>	<b>0.203</b>
RDT&E Articles Qty			
<b>AFATDS:</b> Program management and engineering support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.220</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>AFATDS:</b> MCTSAA tested new SW and SOST.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.950</b>
RDT&E Articles Qty			
<b>AFATDS:</b> Development of improved interoperability with USMC and Joint systems.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>1.512</b>
RDT&E Articles Qty			
<b>AFATDS:</b> Development of AV7.x software. Increased functionality, interoperability, and ease of use. Better interface with USMC and USN systems.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.420</b>	<b>0.043</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>GCCS-I3:</b> Operational system development.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>7.889</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>UOC:</b> Engineering and manufacturing development effort included design of production representative modules.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.425</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>UOC:</b> Operational Testing.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.625</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>UOC:</b> Program Management support. Funding for this program has been moved to Project C2273 in PE 0206313 in FY04 and beyond.			

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EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			<b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>		<b>C2270 Command Post Systems</b>	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.592</b>	
RDT&E Articles Qty				
<b>DACT: DACT Security Accreditation, Develop software recovery solution.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.020</b>	<b>0.100</b>	
RDT&E Articles Qty				
<b>DACT: DACT FMF test support.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.424</b>	<b>0.252</b>	<b>0.250</b>	
RDT&E Articles Qty				
<b>DACT: DACT Program Management Support</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.200</b>	<b>0.200</b>	<b>0.105</b>	
RDT&E Articles Qty				
<b>DACT: Prototype/Internal SAASM GPS development.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.587</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>DACT: Internal 188-220 modem development</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>1.500</b>	<b>0.689</b>	<b>0.300</b>	
RDT&E Articles Qty				
<b>DACT: Development, integration, testing and fielding of the Tank and DACT Vehicle Mount.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.239</b>	<b>0.372</b>	<b>0.212</b>	
RDT&E Articles Qty				
<b>DACT: Dismounted DACT Technology Insertion (Wireless comms).</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.019</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>MCTEEP: Development, integration, testing and fielding of selected MCTEEP Software upgrades to enhance the capabilities of MCTEEP. The prospective S/W modifications include: 1) incremental upgrades to accomplish progressively web enabling higher levels of DII/COE compliance, 2) increased data sorting correlation and filtering capabilities to further facilitate rapid responses to complex information requests, 3) transition from the current Sybase licensed data-base management system (DBMS) to a DBMS</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>1.538</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>SIAP: Implement JROC approved Block 0 changes in the TAOM.</b>				

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<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>	<b>C2270 Command Post Systems</b>							
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	<b>7.897</b>	<b>0.000</b>	<b>0.000</b>						
RDT&E Articles Qty									
<b>SIAP:</b> Service System Engineering support to SIAP SE TF. Funding for this program has been moved to Project C2273, PE 0206313 in FY04 and beyond.									
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	<b>6.177</b>	<b>0.142</b>	<b>0.000</b>						
RDT&E Articles Qty									
<b>TLDHS:</b> Testing, development, and integration support.									
<b>(U) Total \$</b>	<b><u>39.487</u></b>	<b><u>9.064</u></b>	<b><u>10.727</u></b>						
<b>(U) PROJECT CHANGE SUMMARY:</b>	<b><u>FY 2003</u></b>	<b><u>FY 2004</u></b>	<b><u>FY 2005</u></b>						
<b>(U) FY 2004 President's Budget:</b>	27.943	9.090	7.980						
(U) Adjustments from the President's Budget:									
(U) Congressional Program Reductions									
(U) Congressional/OSD Program Reductions									
(U) Congressional Increase									
(U) Congressional Rescissions									
(U) Minor Affordability Adjustment									
		-0.168	-0.740						
(U) Reprogrammings	11.871	0.142	3.487						
(U) SBIR/STTR Transfer	-0.327								
<b>(U) FY 2005 President's Budget:</b>	<b>39.487</b>	<b>9.064</b>	<b>10.727</b>						
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b>									
<u>Line Item No. &amp; Name</u>	<b><u>FY 2003</u></b>	<b><u>FY 2004</u></b>	<b><u>FY 2005</u></b>	<b><u>FY 2006</u></b>	<b><u>FY 2007</u></b>	<b><u>FY 2008</u></b>	<b><u>FY 2009</u></b>	<b><u>To Compl</u></b>	<b><u>Total Cost</u></b>
PMC BLI# 463100 TCO	0.900	0.406	3.259	0.191	0.390	0.390	0.190	Continuing	Continuing
PMC BLI# 474900 IAS MOD	0.665	1.347	1.354	1.375	1.398	1.445	1.474	Continuing	Continuing
PMC BLI# 463100 AFATDS	1.164	0.674	0.173	4.221	8.128	8.987	3.305	Continuing	Continuing
PMC BLI# 463100 UOC	25.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	25.241
PMC BLI# 419000 UOC	0.000	29.010	35.933	30.109	54.471	96.523	112.784	Continuing	Continuing
PMC BLI# 463100 DACT	6.372	4.128	0.939	1.385	0.200	0.300	0.300	Continuing	Continuing
PMC BLI# 473300 TLDHS	9.062	28.235	0.000	0.000	0.000	0.000	0.000	0.000	37.297

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Sys</b>	PROJECT NUMBER AND NAME <b>C2270 Command Post Systems</b>
<p><b>(U) Related RDT&amp;E:</b>            (U) PE 0301301L (Department of Defense Intelligence and Information Systems/Military Intelligence Integrated Data System/Integrated Data Base I and II) Defense.            (U) Navy Tactical Flag Communication and Control System.</p> <p><b>(U) D. ACQUISITION STRATEGY:</b></p> <p><b>(U) TCO:</b> Contracting is via General Services Administration schedules with various vendors and is for software maintenance and COTS evaluation and integration. Performance base reviews are conducted quarterly by the PMO.</p> <p><b>(U) MSBL:</b> Funds applied to Northrop Grumman Information Technology (NGIT), San Diego, CA for development of MSBL client in MS Windows environment and development of client for foot mobile Marines in Windows CEOSS environment. Funds applied to Titan Corporation, Dumfries, VA and NGIT, Stafford, VA under the CEOSS contract for program management and engineering support. Funds applied to MCR Federal for C2PC Life Cycle Cost Estimate development. Funds applied to SPAWAR, Charleston, SC for build, test, and support COE compliant versions of GCC-J in support of six Warfighting functions.</p> <p><b>(U) AFATDS:</b> AFATDS is a Cost Plus Award Fee contract through Army CECOM, Ft. Monmouth, N. J. R&amp;D efforts will be a combined effort between the software developer (Raytheon), the Army PM and the USMC of software enhancements for the next planned versions of AFATDS (V6.3.2 and V7).</p> <p><b>(U) DACT:</b> The Program develops software and hardware for two operational domains. The mounted DACT is a Command Control Situational Awareness device that will be installed in various tactical vehicles at the battalion and below levels with a special vehicle mounting kit. The Dismounted DACT is a Command Control Situational Awareness hand-held device that will be fielded to echelons below company level.</p> <p><b>(U) MCTEEP:</b> Competitively award a cost plus fixed fee contract in 4th Qtr 02. R&amp;D component of this contract will be to enhance existing MCTEEP S/W version 4.0 or to further develop the capabilities of the MCTEEP variant, the M. C. Database Management Tool.</p> <p><b>(U) IAS:</b> The IAS program uses existing Government contracts for hardware and software development and integration. The system is comprised primarily of Commercial Off-the-Shelf (COTS) and Government Off-The-Shelf (GOTS) equipment.</p> <p><b>(U) SIAP:</b> Systems Engineering effort that will be utilized to reduce risk and increase interoperability for legacy and future C4ISR systems.</p> <p><b>(U) GCCS I3:</b> The acquisition of components (software/hardware) for the GCCS I 3 initiative will maximize the use of existing COTS, GOTS, NDI, and GFE equipment. The GCCS I3 initiative will be accomplished in collaboration with Millennium Technologies Corporation and Computer Science Corporation. Maintenance support will be managed by MARCORLOGBASES and those contractors listed above. This strategy accomplishes several goals: procure and field equipment effectively and efficiently, reduce logistics support, and reduce operational maintenance support.</p> <p><b>(U) UOC:</b> The UOC COC is a Competitively Awarded Contract (cost type) for design and FP production options.</p> <p><b>(U) TLDHS:</b> The acquisition of components (software/hardware) for the TLDHS initiative will maximize the use of existing COTS, GOTS, NDI and GFE. Software development is contracted via general services administration schedules.</p>		

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>	<b>C2270 Command Post Systems</b>
<b>E. Major Performers:</b>		
<b>TACTICAL COMBAT OPERATIONS (TCO)</b>		
FY 03	SPAWAR, CHARLESTON, S.C. Provide funds to EMA, INC, Charleston, S.C. for Testing and Validation of Advanced Server Concepts. Dec 02.	
FY 04	SPAWAR, CHARLESTON, S.C. Provide funds to EMA, INC, Charleston, S.C. To develop additional functional capabilities, integrate software changes into new system, and perform testing. Dec 03.	
FY 05	SPAWAR, CHARLESTON, S.C. Provide funds to EMA, INC, Charleston, S.C. for Testing and Validation of new workstation concept, integrate software changes into new system, and perform testing. Dec 04.	
<b>MAGTF SOFTWARE BASELINE (MSBL)</b>		
FY 03	NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), San Diego, CA. Software development: C2PC and C2PC Light. Feb 03. NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA. Engineering support. Oct 02. SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) Charleston, SC. Software integration, building, testing and fielding MSBL. Dec 02. TITAN CORPORATION, Dumfries, VA. Program Management Support. Oct 02. MCR FEDERAL, McClean, VA. Life Cycle Cost Estimate Development. May 02. JB MANAGEMENT, Eaton, NJ. Common Message Processor Development. Apr 02.	
FY 04	NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), San Diego, CA. Software development C2PC and C2PC Light. Estimated award date Dec 03. SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) Charleston, SC. Software integration, building, testing and fielding MSBL. Estimated award Dec 04. NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA. Engineering support. Oct 03. TITAN CORPORATION, Dumfries, VA. Program Management Support. Oct 03.	
FY 05	NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), San Diego, CA. Software development: C2PC and C2PC Light. Est award Dec 04. SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR) Charleston, SC. Software integration, building, testing and fielding MSBL. Est award Dec 04. TITAN CORPORATION, Dumfries, VA. Program Management Support. Est award Oct 04.	
<b>ADVANCED FIELD ARTILEY TACTICAL DATA SYSTEM (AFATDS)</b>		
FY 03	RAYTHEON, Fort Wayne IN. Develop and test software. Dec 02. MCOTEA, Quantico VA. Test V6.3.2 software. Award Dec 02. MCTSSA, Software testing. Award Mar 03.	
FY 04	RAYTHEON, Fort Wayne IN. Develop and test software. Dec 03. MCOTEA, Quantico VA. Test V6.3.2 software. Award Dec 03. MCTSSA, Software testing. Award Mar 04.	
FY 05	RAYTHEON, Fort Wayne IN. Develop and test software. Dec 04. MCOTEA, Quantico VA. Test V6.3.2 software. Award Dec 04. MCTSSA, Software testing. Award Mar 05.	

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>	<b>C2270 Command Post Systems</b>
<p><b>DATA AUTOMATED COMMERCIAL TERMINAL (DACT)</b></p> <p>FY 03 RAYTHEON, Fort Wayne, IN, Develop and test Tank Vehicle Mount, Oct 02.            NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA. Program support. Oct 02.            RAYTHEON (via Army CECOM) Ft. Monmouth, NJ. Modem integration. Jan 03.</p> <p>FY 04 NORTHROP GRUMMAN, San Diego, CA. Software Development, Jan 03.            NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA. Program Support. Oct 03.            GENERAL DYNAMICS (via Army CECOM), Wireless communication, Feb 04.            COMTECH, Germantown, MD. Over the horizon communication, Mar 04.</p> <p><b>DATA AUTOMATED COMMERCIAL TERMINAL (DACT) CONT</b></p> <p>FY 05 NORTHROP GRUMMAN, San Diego, CA. Software Development, Jan 04.            NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA. Program Support. Oct 04.</p> <p><b>MARINE CORPS TRAINING EXERCISE EMPLOYMENT PLAN (MCTEEP)</b></p> <p>FY 03 STANLEY ASSOCIATES, INC., Woodbridge, VA. Development, integration, testing and fielding of selected MCTEEP Software upgrades to enhance the capabilities of MCTEEP. Nov 02.</p> <p><b>INTELLIGENCE ANALYSIS SYSTEM (IAS)</b></p> <p>FY 03 NSWC, CRANE, IN. Critical Improvements to GCCS I3 software for program requirements and software mods.            SPAWAR SSCC, Charleston, VA., Joint Interoperability, perform IOS Client and Server Trade Study.</p> <p><b>GLOBAL COMMAND CONTROL SYSTEM (GCCS I3)</b></p> <p>FY 03 MTC SERVICES CORPORATION, Stafford, VA. Provide funds for engineering and program support services.            AUSTIN INFORMATION SYSTEMS (AIS), Austin, TX. Provide funds for engineering and program support services.</p> <p><b>UNIT OPERATIONS CENTER (UOC)</b></p> <p>FY 03 GENERAL DYNAMICS, Scottsdale, AZ. Statement of Objectives for Combat Operations Center and Engineering Manufacture Development. May 02.</p> <p><b>TARGET LOCATION DESIGNATION AND HAND-OFF SYSTEM (TLDHS)</b></p> <p>FY 03 NSWC, Crane, IN. Technical design agent and in-service engineering agent. Mar 03.            Titan, Dumfries, VA. Program support. Oct 02.            ACS DEFENSE (SYNETICS), King George, VA. Software developer. Nov 02.</p> <p>FY04 ACS DEFENSE (SYNETICS), King George, VA. Software developer. Nov 03.</p>		

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Exhibit R-3 Cost Analysis						DATE: February 2004						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N/BA-7 Operational Sys Dev			0206313M Marine Corps Communications Sys			C2270 Command Post Systems						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
UOC	WR	SPAWAR, Charleston, SC	6.116	0.365	10/02					0.000	6.481	
UOC	RCP	SPAWAR, Charleston, SC	0.000	0.070	03/03					0.000	0.070	
UOC	WR	MCSC, Quantico, VA	2.069	0.046	11/02					0.000	2.115	
UOC	RCP	General Dynamics, Scottsdale, AZ	7.000	7.408	12/03					0.000	14.408	
TCO	RCP	MCSC, Quantico, VA	0.518	0.005	12/02	0.160	12/03	0.254	12/03	0.000	0.937	
TCO	WR	SPAWAR, Charleston, SC	1.270	0.058	12/02	0.678	12/03	0.626	12/04	1.921	4.553	
MAGTF C4I BASELINE	RCP	SPAWAR, Charleston, SC	7.510	1.247	12/02	1.200	12/03	1.300	12/04	Cont.	Cont.	
MAGTF C4I BASELINE	RCP	Northrop Grumman, San Diego, CA	11.241	3.574	12/02	4.022	12/03	3.344	12/04	Cont.	Cont.	
MAGTF C4I BASELINE	RCP	Northrop Grumman, Stafford, VA	5.350	0.291	10/02	0.350	10/03	0.397	10/04	Cont.	Cont.	
MAGTF C4I BASELINE	RCP	Titan Corporation, Dumfries, VA		0.175	10/02	0.180	10/03	0.225	10/04	Cont.	Cont.	
MAGTF C4I BASELINE	WR	MCTSSA, Camp Pendleton, CA	0.725	0.000	12/02	0.179	12/03	0.187	12/04	Cont.	Cont.	
MAGTF C4I BASELINE	RCP	MCR Federal, McClean, VA		0.110	05/03					Cont.	Cont.	
MAGTF C4I BASELINE	RCP	JB Management		0.090	04/02					Cont.	Cont.	
MAGTF C4I BASELINE	WR	MCSC, Quantico, VA		0.146	10/02					Cont.	Cont.	
AFATDS	C/FFP	CECOM, Ft. Monmouth, NJ	1.858	1.612	12/02	0.515	12/03	0.950	12/04	Cont.	Cont.	
AFATDS	CPFF/MIPR	USA, CECOM	1.970	0.029	12/02					Cont.	Cont.	
AFATDS	WR	MCSC (MCTSSA), Quantico, VA	0.020	0.220	12/02					Cont.	Cont.	
AFATDS	CPFF/MIPR	CECOM, Ft. Monmouth, NJ	1.025	0.925	12/02			1.512	12/04	Cont.	Cont.	
AFATDS	FFP	Northrop Grumman, Stafford, VA		0.153	10/02	0.043		0.203	10/04	Cont.	Cont.	
GCCS-13	RCP	MTC, Woodbridge, VA	0.750	1.211	11/02	0.043	10/03	0.000		0.000	2.004	
GCCS-13	MIPR	NSA		0.032	12/02					0.000	0.032	
GCCS-13	RCP	AIS, Austin, TX		0.177	11/02					0.000	0.177	
DACT	TM	Raytheon, Fort Wayne, IN	1.896	0.587	10/02	0.200		0.105		Cont.	Cont.	
DACT	TMM/MIPR	Booz-Allen, Ft. Monmouth, NJ	0.080	0.000		0.000		0.000		Cont.	Cont.	
DACT	FFP	Northrop Grumman, San Diego CA	1.131	0.439	11/02	0.000	11/03	0.592	11/04	Cont.	Cont.	
DACT	RCP	COMTECH, Germantown, MD				0.372	11/03	0.212	11/04	Cont.	Cont.	
DACT	WR	MCSC, Quantico, VA		1.500	01/03	0.689	02/04	0.300	01/05	Cont.	Cont.	
MCTEEP	C/CPFF	TBD		0.000		0.019	11/03			0.000	0.019	
TLDHS	RCP	ACS, King George, VA		1.529	11/02	0.142	12/03			Cont.	Cont.	
<b>Subtotal Product Dev</b>			50.529	21.999		8.792		10.207		Cont.	Cont.	
Remarks:												

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Exhibit R-3 Cost Analysis							DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N/BA-7 Operational Sys Dev			0206313M Marine Corps Communications Sys				C2270 Command Post Systems					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
UOC	WR	2nd MARDIV	0.000	0.005	11/02					0.000	0.005	
UOC	WR	MARFORRES	0.000	0.000	10/02					0.000	0.000	
UOC	WR	1st MAW	0.000	0.005	10/02					0.000	0.005	
UOC	WR	MCTSSA	0.000	0.004	11/02					0.000	0.004	
DACT	FFP	NORTHROP GRUMMAN, Stafford, VA	0.300	0.424	10/02	0.252	10/03	0.250	10/04	Cont.	Cont.	
SIAP	RCP	CECOM, FT. MONMOUTH, NJ		1.286	06/03					0.000	1.286	
SIAP	RCP	MCSC, QUANTICO, VA		5.566	06/03					0.000	5.566	
SIAP	RCP	GSA, BREMERTON, WA		0.241	03/03					0.000	0.241	
SIAP	RCP	MCTSSA		0.242	05/03					0.000	0.242	
SIAP	RCP	NSWC, DAHLGREN		0.150	10/03					0.000	0.150	
SIAP	WR	MCSC, QUANTICO, VA		0.113	08/03					0.000	0.113	
SIAP	WR	NSWC, CRANE		1.045	09/03					0.000	1.045	
SIAP	RCP	NSWC, CRANE		0.440	02/03					0.000	0.440	
SIAP	RCP	REG CONT OFF		0.160	10/03					0.000	0.160	
SIAP	RCP	NAVASEA, WNY, DC		0.192	10/03					0.000	0.192	
TLDHS	WR	NSWC, DAHLGREN		0.638	11/02					0.000	0.638	
<b>Subtotal Support</b>			0.300	10.511		0.252		0.250		Cont.	Cont.	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TCO	RCP	MCTSSA, Camp Pndltn, CA	0.261	0.000	02/03	0.000		0.170	02/05	0.000	0.431	
IAS Mod	WR	NAVSEA, Crane	0.754	0.130	10/02					0.300	1.184	
IAS Mod	RCP	MCTSSA	0.236	0.000						0.100	0.336	
IAS Mod	RCP	SPAWAR, Charleston	1.035	0.801	11/02					0.449	2.285	
DACT	WR	FMF, MCB Camp Pendleton ( I MEF)	0.300	0.000		0.020	10/03	0.100	12/04	Cont.	Cont.	
UOC	RCP	MCOTEA, Quantico, VA	0.090	0.270	04/03	0.000				0.000	0.360	
UOC	MIPR	Aberdeen Proving Ground, MD	0.000	0.155	09/03	0.000				0.000	0.155	
TLDHS	RCP	NAWC, China Lake, CA		0.144	11/02					0.000	0.144	
TLDHS	RCP	MCTOEA		0.082	11/02					0.000	0.082	
TLDHS	RCP	NSWC, Crane		1.149	08/03					0.000	1.149	
TLDHS	RCP	NGIT, San Diego, CA		2.635	08/03					0.000	2.635	
<b>Subtotal T&amp;E</b>			2.676	5.366		0.020		0.270		Cont.	Cont.	
Remarks:												

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Exhibit R-3 Cost Analysis						DATE: February 2004						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N /BA-7 Operational Sys Dev			0206313M Marine Corps Communications Sys			C2270 Command Post Systems						
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
UOC	RCP	MITRETEK	0.000	0.159	12/02					0.000	0.159	
UOC	IDIQ	Logicon/NGIT, Stafford VA	5.036	1.350	12/02	0.000				0.000	6.386	
UOC	FFP	Mevatec, Crstl City VA	0.499	0.102	09/03	0.000				0.000	0.601	
<b>Subtotal Management</b>			3.460	1.611		0.000				0.000	5.071	
Remarks:												
<b>Total Cost</b>				<b>39.487</b>		<b>9.064</b>		<b>10.727</b>		<b>Cont.</b>	<b>Cont.</b>	

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EXHIBIT R-4/4a, Schedule Profile/Detail

DATE:

February 2004

APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT NUMBER AND NAME

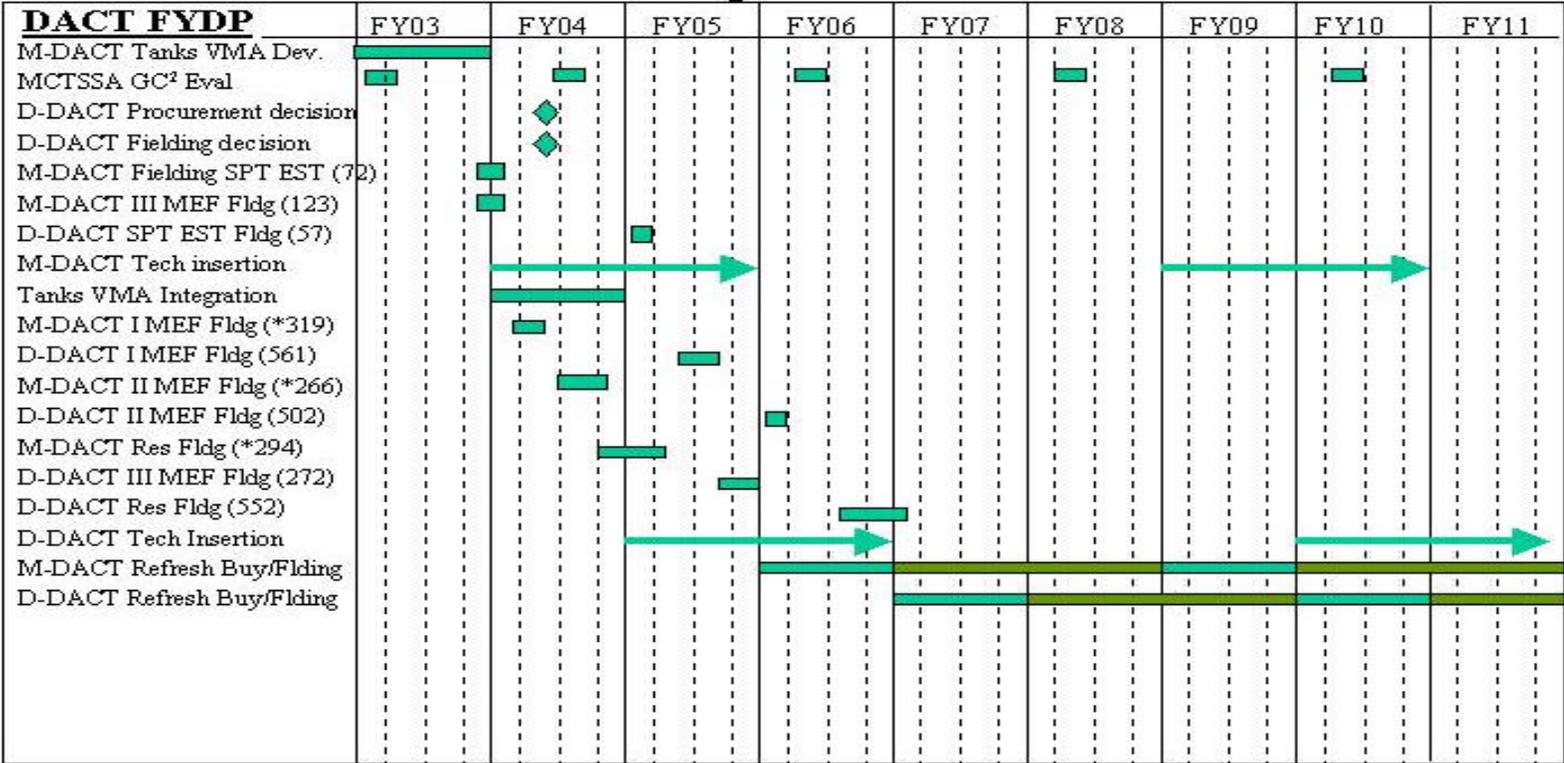
PROJECT NUMBER AND NAME

RDT&E, N /BA-7 Operational Sys Dev

0206313M Marine Corps Communications Sys

C2270 Command Post Systems

## DACT Program Schedule



08/06/2003

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**Program Funding Summary**

(APPN, BLI #, NOMEN)

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) RDT&E,N C2270	1.450	1.533	1.559	1.278	0.664	0.583	0.599	Continuing	Continuing
(U) PMC BLI# 463100, DACT	6.372	4.128	0.939	1.385	0.200	0.300	0.300	Continuing	Continuing







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EXHIBIT R-2a, RDT&E Project Justification

DATE:

**February 2004**

APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communication Systems</b>					PROJECT NUMBER AND NAME <b>C2272 Intelligence C2 Systems</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY2009	Cost To Complete	Total Program
Project Cost	<b>24.129</b>	<b>17.759</b>	<b>32.294</b>	<b>27.668</b>	<b>20.964</b>	<b>17.441</b>	<b>15.566</b>	<b>Cont</b>	<b>Cont</b>
RDT&E Articles Qty									

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

(U) Intelligence Command and Control (C2) supports the employment of reconnaissance, surveillance, and target acquisition resources and the timely planning and processing of all-source intelligence. It ensures that all-source tactical intelligence is tailored to meet specific mission requirements. The systems below collect and convert raw intelligence data on the battlefield into processed information and deliver the processed products to the Intelligence Analysis Systems (IAS) for analysis and dissemination.

- 1. Tactical Exploitation of National Capabilities (TENCAP)** is a program designed to enhance the ability of tactical Marine Corps forces to exploit the capabilities of national intelligence-gathering systems. Congressionally directed, it requires close liaison with the intelligence community and involves complex and highly-sensitive activities.
- 2. The Topographic Production Capability (TPC)** is an advanced Geospatial Information System, which employs commercial hardware and software to provide the framework data for the common battlefield visualization by producing geospatial intelligence products in digital format and limited hardcopy map products.
- 3. The Joint Surveillance Target Attack Radar (JSTARS)** connectivity program will develop software which will allow the JSTARS Moving Target Indicator (MTI), Fixed Target Indication (FTI) and Synthetic Aperture Radar (SAR) Data to be passed from the JSTARS Common Ground Station (CGS) to lower echelons within the MAGTF. Once the Connectivity Software has been developed, a requirement for a JSTARS CGS software upgrade is anticipated under Joint Program Office Pre-Planned Product Improvement (P3I) initiative.
- 4. The Coastal Battlefield Reconnaissance and Analysis (COBRA)** system is a passive multispectral sensor system capable of operating in a Manned Aircraft and an Unmanned Aerial Vehicle (UAV). Imagery recorded on the UAV or disseminated via data link is analyzed by the COBRA processing station. COBRA algorithm processing provides near real-time automatic minefield detection with Differential Global Positioning System (DGPS) location accuracy.
- 5. The JSIPS-TEG** is a highly mobile imagery ground station designed to receive and process tactical imagery in support of the MEF/MAGTF commander. This Common Imagery Ground Surface System (CIGSS) is an integral component of the USMC Distributed Common Ground Station (DCGS) architecture that enables the MEF/MAGTF commander to remain interoperable with other Joint and USMC C4I systems. The system provides the capability to receive, process, store, exploit (to include PGM targeting support), and disseminate national theater, and tactical imagery, as well as providing interoperability with the Army's Tactical Exploitation System (TES), the Navy's Joint Services Imagery Processing System - Navy (JSIPS-N), and the Air Force Intelligence Systems Reconnaissance Manager (ISRM) systems during joint engagements.
- 6. The Counterintelligence (CI) and Human Intelligence (HUMINT) Equipment Program (CIHEP)** is an intelligence collection, analysis and reporting suite of equipment, employing Commercial-Off-The-Shelf (COTS) and non-developmental items (NDI) of equipment and software. It will produce digital soft copy as well as hard copy CI, Interrogator-Translator (IT) and HUMINT information reports and images for the Marine Air Ground Task Force (MAGTF) or Joint Force (JTF) Commander. CIHEP will allow the electronic storage and dissemination of HUMINT information throughout the command, as well as for low volume traditional hard copy dissemination.
- 7. Team Portable Collection System - Multi-Platform Capable (TPCS-MPC)** - The TPCS- MPC will provide the MAGTF commander with a modular and scaleable carry on/off suite of equipment capable of conducting Signals Intelligence (SIGINT) operations onboard organic non-dedicated Marine Corps air, ground, and water borne platforms. The TPCS-MPC will be highly modular, mission configurable, multi-platform system incorporating plug-and-play technologies. The system will provide state-of-the-art, versatile air/ground/water borne SIGINT and EW support to the MAGTF through the use of lightweight, flexible mission equipment suites capable of detecting, identifying, locating, and exploiting current and emerging communications technologies, intercepting non-communication signals, and improving the system's geolocation accuracy.
- 8. Tactical Remote Sensor System (TRSS-PIP)** - The TRSS provides the Marine Air Ground Task Force (MAGTF) commander with an organic variety of sensors that will cover his Area of Responsibility for months at a time by allowing the commander to autonomously conduct unattended, semi-covert, ground surveillance of distant areas of the battlefield. Using a network of reliable passive sensors, these multiple systems enhance the commanders' ability to cover gaps in the overall intelligence collection effort, thus reducing the need to employ costly weapons systems. The sensor systems also reduces the requirement to employ Marines behind enemy lines for extended periods of time.

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**EXHIBIT R-2a, RDT&E Project Justification**

DATE:

**February 2004**

APPROPRIATION/BUDGET ACTIVITY

**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME

**0206313M Marine Corps Communication Systems**

PROJECT NUMBER AND NAME

**C2272 Intelligence C2 Systems**

**9. MAGTF Secondary Imagery Dissemination System (MSIDS)** is a digital imagery collection/transmission system employed by Reconnaissance (Recon) and Light Armored Reconnaissance (LAR) Marines. MSIDS consist of one base station and three outstations. The base station consists of a ruggedized laptop computer and printer for hard copy printout of collected images. The outstation consists of a basic digital still-photo camera, advanced digital still-photo camera, night vision intensifier tube, and ruggedized ultra-portable laptop computer. All equipment comprising MSIDS is Commercial-Off-The-Shelf (COTS) or Government Off The Shelf (GOTS).

**10. The Intelligence Analysis Systems (IAS)** supports the employment of reconnaissance, surveillance, and target acquisition resources and the timely planning and processing of all-source intelligence; it ensures that tactical intelligence is tailored to meet specific mission requirements. A Marine Expeditionary Force (MEF) IAS variant will also process signal intelligence.

**11. Global Command and Control System Integrated Imagery and Intelligence (GCCS I3)** is a joint program that is designed to enhance the operational Commander's situation awareness and track management through the use of a standard set of integrated, linked tools and services that maximize commonality and interoperability across the tactical theater, and national communities. GCCS-I3 operates in joint and service specific battlespace and is interoperable, transportable, and compliant with the DoD mandated Common Operating Environment (COE).

**12. Technical Control Analysis Center (TCAC).** The primary mission of the TCAC is to provide the Radio Battalions (RadBn) with an automated Signals Intelligence (SIGINT) processing, analysis, and reporting capability. The TCAC system is designed to receive collected intelligence from tactical, theater and National level producers and provide a multi-source fused intelligence production capability to support the Marine Air Ground Task Force (MAGTF) commander via the Intelligence Analysis System (IAS), as well as the National Security Agency (NSA) and other National consumers.

**13. Intelligence Broadcast Receiver (IBR)** provides Marine tactical commanders access to National level Near Real-Time intelligence data provided over the Integrated Broadcast Service. IBR is employed across the MAGTF echelons through the following Host Systems; Intelligence Analysis System; Tactical Air Operations Center; Technical Control and Analysis Center; Tactical Air Command Center; Joint STARS Common Ground Station; Tactical Electronic Reconnaissance Processing and Evaluation System and Common Air Command and Control Systems and Joint Stars Work Station.

**14. Intelligence System Readiness (ISR)** Program will provide timely and targeted solutions to better enable the MAGTF Commander to accomplish his mission by (1) injecting technology rapidly, and (2) conducting up-front testing and integration. The current Marine Corps Intelligence architecture encompasses dozens of systems, acquired over a span of decades, often with little regard for interoperability. Additionally, some systems have gaps in functionality and interoperability which, when balanced against rapid advancements in technology, bring those systems to the brink of obsolescence. The ISR Program enhances the Marine Corps Intelligence Architecture by mitigating operational shortfalls through Commercial-Off-The-Shelf (COTS), Government-Off-The-Shelf (GOTS) and Non-Developmental Item (NDI) technology. In this way, ISR provides proof-of-concept prototypes and focused Research and Development (R&D) efforts to support the Marine Corps Intelligence Architecture and shorten the time required to fill gaps and field systems. The ISR program Team also trains Marines to maximize new systems and capabilities.

FY03 DERF Funds are listed under Project C9273.

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C2272 Intelligence C2 Systems</b>		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.080</b>	<b>0.031</b>	<b>0.035</b>	
RDT&E Articles Qty				
<b>CIHEP:</b> Engineering, Integration and Technical support for technical refresh and update of program hardware/software upgrades.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.112</b>	<b>0.081</b>	<b>0.081</b>	
RDT&E Articles Qty				
<b>CIHEP:</b> Program Management Support for the technical refresh and update of program hardware/software upgrades.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.500</b>	<b>0.750</b>	<b>0.850</b>	
RDT&E Articles Qty				
<b>COBRA:</b> NAVSEA Technical and Contractual Support.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.100</b>	<b>0.100</b>	<b>0.200</b>	
RDT&E Articles Qty				
<b>COBRA:</b> NAVAIR Technical Support, Platform Integration Services				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.223</b>	<b>0.480</b>	<b>0.982</b>	
RDT&E Articles Qty				
<b>COBRA:</b> MCSC Program Support				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>4.440</b>	<b>1.610</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>COBRA:</b> SD&D Contract, Northrup Grumman, System Development, Spiral A.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.272</b>	<b>0.000</b>	<b>7.645</b>	
RDT&E Articles Qty				
<b>COBRA:</b> SD&D Contract, Northrup Grumman, System Development, Spiral B.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.521</b>	<b>1.533</b>	
RDT&E Articles Qty				
<b>GCCS-13:</b> Operational system development. Funding for this effort in FY02 and FY03 is provided under Project C2270 of this Program Element (PE).				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.400</b>	<b>0.574</b>	
RDT&E Articles Qty				
<b>IAS MOD:</b> Critical improvements to GCCS-13 Intelligence Support software for USMC requirements. Funding for this effort in FY02 and FY03 is provided under Project C2270 of this PE.				

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C2272 Intelligence C2 Systems</b>		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.077</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>IAS MOD:</b> Joint interoperability assessment and documentation. Funding for this effort in FY02 is provided under Project C2270 of this PE.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.297</b>	<b>0.431</b>	
RDT&E Articles Qty				
<b>IAS MOD:</b> Software modifications to support USMC joint interoperability. Funding for this effort in FY03 is provided under Project C2270 of this PE.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.200</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>IAS MOD Kit.</b> Perform trade study for the IOS server, MEF IAS client and IOW laptop.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.277</b>	<b>0.288</b>	
RDT&E Articles Qty				
<b>IBR:</b> Engineering and technical management support.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.854</b>	<b>0.722</b>	
RDT&E Articles Qty				
<b>IBR:</b> Technical assessment of implementation of the Integrated Broadcast Service Common Message Format into Marine Corps Host Systems.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.340</b>	
RDT&E Articles Qty				
<b>ISR:</b> Program Management and Technical Support for the ISR Program.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.420</b>	
RDT&E Articles Qty				
<b>ISR:</b> Engineering Support for delivery of new technology initiatives to the Operating Forces.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.308</b>	
RDT&E Articles Qty				
<b>ISR:</b> System Engineering support for the ISR Testing and Training Center.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.260</b>	<b>0.316</b>	<b>0.261</b>	
RDT&E Articles Qty				
<b>JSTARS:</b> Engineering and technical support for development and integration of connectivity software that would reside on existing MAGTF systems and utilize JSTARS data.				

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EXHIBIT R-2a, RDT&E Project Justification		DATE: February 2004		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C2272 Intelligence C2 Systems</b>		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.166</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>JSTARS:</b> Contractor advisory and assistance services.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.100</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>JSTARS:</b> Common Ground Moving Target Indication client testing.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.050</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>JSTARS:</b> Joint Services Work Stations (JSWS) Field User Evaluation (FUE).				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.338</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>JSTARS:</b> Integration of MTES software upgrade into Common Ground Station (CGS) architecture.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.483</b>	
RDT&E Articles Qty				
<b>JSTARS:</b> Integration of emerging Moving Target Indicator (MTI) sensors into JSTARS CGS software baseline.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.485</b>	<b>0.400</b>	<b>0.355</b>	
RDT&E Articles Qty				
<b>JSIPS-TEG:</b> Engineer and technical management support.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>1.644</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>JSIPS-TEG:</b> Development of upgrades to existing software baseline to include the capability to receive and process emerging airborne imagery sensor collection platforms.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.780</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>JSIPS-TEG:</b> Development of Time Sensitive Targeting (TST) interfaces within the common software baseline.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.940</b>	
RDT&E Articles Qty				
<b>JSIPS-TEG:</b> Development of sensor cross-cueing interfaces within the common software baseline.				

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C2272 Intelligence C2 Systems</b>		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.940</b>	
RDT&E Articles Qty				
<b>JSIPS-TEG:</b> Development of man-portable Common Data Link (CDL) capability.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.146</b>	<b>0.147</b>	
RDT&E Articles Qty				
<b>MSIDS:</b> Engineering and technical support for product development of program hardware and software refresh.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.064</b>	<b>0.055</b>	
RDT&E Articles Qty				
<b>MSIDS:</b> Program Management and technical support for product development of program hardware and software refresh.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.021</b>	<b>0.038</b>	
RDT&E Articles Qty				
<b>MSIDS:</b> Program Management and technical support for Technical and Evaluation of program refresh.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.890</b>	<b>0.904</b>	
RDT&E Articles Qty				
<b>TCAC:</b> Software development keeping TCAC with COE 4.X and future releases.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>2.757</b>	<b>2.413</b>	<b>3.000</b>	
RDT&E Articles Qty				
<b>TENCAP:</b> Program support and management; evaluate national intelligence data systems for MAGTF applicability.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.042</b>	<b>0.463</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>TENCAP:</b> Technical assessments of emerging national data dissemination capabilities.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.015</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>TENCAP:</b> Support operational planning to enhance operating force capabilities to US national intelligence data within the MAGTF C4I architecture.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>TENCAP:</b> Evaluate the utility of emerging exploitation, automated and manual target recognition and detection tools.				

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EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			<b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communication Systems</b>		<b>C2272 Intelligence C2 Systems</b>	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.044</b>	<b>0.191</b>	<b>0.132</b>	
RDT&E Articles Qty				
<b>TPC: Contractor support for Mods</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.189</b>	<b>0.207</b>	<b>0.215</b>	
RDT&E Articles Qty				
<b>TPC: Perform Mods OT&amp;E</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.404</b>	<b>0.348</b>	<b>0.743</b>	
RDT&E Articles Qty				
<b>TPCS-MPC: EDM Design.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.525</b>	
RDT&E Articles Qty				
<b>TPCS-MPC: System development.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.879</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>TPCS-MPC: Training development and test support.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.884</b>	<b>0.126</b>	<b>0.392</b>	
RDT&E Articles Qty				
<b>TPCS-MPC: Program support and management.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.463</b>	
RDT&E Articles Qty				
<b>TPCS-MPC: Contractor advisory assistance service.</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>1.094</b>	
RDT&E Articles Qty				
<b>TPCS-MPC: Operational Test and Evaluation (OT&amp;E).</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>2.366</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>TRSS-PIP: Development of HHPM and Low-Cost Imager.</b>				

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**EXHIBIT R-2a, RDT&E Project Justification**

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communication Systems</b>		<b>C2272 Intelligence C2 Systems</b>
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.154</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> Acoustic classification effort.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.040</b>	<b>0.353</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> Software development of HHPM and Low Cost Imager; Improved Air Delivered Sensor (IADS) II; Encodder Transmitter Unit (ETU) II; Windows 2000 migration; and RSMS ver. 3.1 field verification/version 4.0.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> R&D contractual supports for HHPM and Low-Cost Imager.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.224</b>	<b>0.000</b>	<b>0.280</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> R&D support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> R&D support for alternative life-cycle maintenance effort.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> Field-testing and evaluation of IADS II.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.615</b>	<b>2.000</b>	<b>2.000</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> Development of Unattended Ground Miniaturized Sensors (UGMS) and AADS electronic components.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.810</b>	<b>4.150</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> Air Certification of Advanced Air Delivered Sensor (AADS) store.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.200</b>	<b>0.400</b>
RDT&E Articles Qty			
<b>TRSS-PIP:</b> Software Development of AADS and UGMS Monitoring System.			

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communication Systems</b>			<b>C2272 Intelligence C2 Systems</b>
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.160</b>	
RDT&E Articles Qty				
<b>TRSS-PIP:</b> Development of air relay/recovery.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.054</b>	
RDT&E Articles Qty				
<b>TRSS-PIP:</b> Development of alternative power.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>7.253</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				

**PBD-290:** OSD Derf Execution.

<b>(U) Total \$</b>	<b><u>24.129</u></b>	<b><u>17.759</u></b>	<b><u>32.294</u></b>
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**(U) PROJECT CHANGE SUMMARY:**

	<b>FY2003</b>	<b>FY2004</b>	<b>FY2005</b>
(U) FY 2004 President's Budget:	<b>18.352</b>	<b>17.616</b>	<b>32.424</b>
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Prog Reduction			
(U) Congressional Rescissions			
(U) Congressional Increases			
(U) Reprogrammings	5.777	0.350	
(U) SBIR/STTR Transfer			
(U) Minor Affordability Adjustment		-0.207	-0.130
(U) FY 2005 Navcompt Budget:	<b>24.129</b>	<b>17.759</b>	<b>32.294</b>

**CHANGE SUMMARY EXPLANATION:**

- (U) Funding: See Above.
- (U) Schedule: Not Applicable.
- (U) Technical: Not Applicable.

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**EXHIBIT R-2a, RDT&E Project Justification**

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APPROPRIATION/BUDGET ACTIVITY

PROGRAM ELEMENT NUMBER AND NAME

PROJECT NUMBER AND NAME

**RDT&E, N /BA-7 Operational Sys Dev**

**0206313M Marine Corps Communication Systems**

**C2272 Intelligence C2 Systems**

**(U) C. OTHER PROGRAM FUNDING SUMMARY:**

<u>Line Item No. &amp; Name</u>		<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
PMC BLI 471400 Intell Support	TRSS-PIP	0.000	9.406	10.622	20.048	18.743	16.414	13.814	Continuing	Continuing
PMC BLI 474700 Intell Support	TRSS-PIP	3.941	0.000	0.000	0.000	0.000	0.000	0.000	0	3.941
PMC BLI 474700 Intell Support Eq	CIHEP	1.798	1.376	1.489	1.585	1.681	1.803	1.909	Continuing	Continuing
PMC BLI 474700 Intell Support Eq	COBRA	0.000	0.000	0.000	1.210	1.817	3.227	0.250	Continuing	Continuing
PMC BLI 474700 Intell Support Eq	JSIPS	8.970	2.875	0.618	0.000	0.000	0.000	0.000	0	12.463
PMC BLI 474700 Intell Support Eq	TPCS-MULTI	0.000	0.000	6.360	8.038	7.746	5.936	0.299	Continuing	Continuing
PMC BLI 474700 Intell Support Eq	MSIDS	0.000	1.051	2.857	1.711	1.712	1.762	1.721	Continuing	Continuing
PMC BLI 474700 Intell Support Eq	IBR	0.100	1.557	3.545	1.409	0.418	0.428	0.436	Continuing	Continuing
PMC BLI 474700 Intell Support Eq	TPC	4.572	3.280	0.573	0.000	0.000	0.000	0.000	Continuing	Continuing
PMC BLI 474700 Intell Support Eq	RREP	2.742	0.000	0.000	4.194	0.000	0.000	4.228	Continuing	Continuing
PMC BLI 474700 Intell Support Eq	TSCM	0.000	2.220	0.000	1.233	0.000	1.330	0.000	Continuing	Continuing
PMC BLI 474700 Intell Support Eq	IAS MOD Kit	0.665	1.347	1.354	1.375	1.398	1.445	1.474	Continuing	Continuing
PMC BLI 474900 Mod Kits Intell	TCAC	1.343	0.350	1.545	0.945	0.945	0.945	1.145	Continuing	Continuing
PMC BLI 474900 Mod Kits Intell	JSTARS	0.256	3.273	4.604	4.615	0.086	4.621	1.502	Continuing	Continuing
PMC BLI 474900 Mod Kits Intell	TERPES	1.163	2.828	0.000	3.022	0.000	3.182	0.000	Continuing	Continuing
PMC BLI 474900 Mod Kits Intell	ISR	0.000	0.000	2.048	4.579	4.624	4.761	4.798	Continuing	Continuing

**(U) Related RDT&E:**

- (U) PE 0301301L (Department of Defense Intelligence and Information Systems/Military Intelligence Integrated Data System/Integrated Data Base I and II)
- (U) PE 0604270A (Intelligence and Electronic Warfare Common Sensor (IEWCS), TACJAM-A)
- (U) PE 0305885G (Tactical Cryptologic Program)
- (U) PE 0603730A (Tactical Surveillance System - Advanced Development), Army TENCAP, Project D560
- (U) PE 0603766A (Tactical Electronic Surveillance System - Advanced Development), Army TENCAP, Project D907
- (U) PE 0604740A (Tactical Surveillance System - Engineering Development), OSD TENCAP, Project D662
- (U) PE 0902398M (United States Special Operations Command), Chariot Program
- (U) PE 0605867N (SEW Surveillance/Reconnaissance Support), Project Z1034
- (U) PE 0206313M (Marine Corps Communication Systems), Project C9273

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**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME

**0206313M Marine Corps Communication Systems**

PROJECT NUMBER AND NAME

**C2272 Intelligence C2 Systems**

**(U) ACQUISITION STRATEGY JSTARS:** JSTARS will utilize ongoing Army and Navy JSTARS contracts for procurement of follow-on Common Data Link (CDL) upgrades and for Pre-Planned Product Improvements (P3I) to the JSTARS CGS software baseline. SPAWAR-Charleston, SC will oversee the integration and testing of these upgrades within the USMC C4I architecture. On-Site contractor logistical support will be provided through General Dynamic's I2P2 contract out of MCLB, Albany, GA.

**(U) ACQUISITION STRATEGY COBRA:** COBRA System Development, Test and Demonstration based upon a competitive, multi-year, CPFF/CPIF contract awarded to Northrop Grumman 4Q 2001. Production will be FFP. Technology insertion will add objective capabilities as they are matured and integrated by other DOD organizations.

**(U) ACQUISITION STRATEGY JSIPS TEG:** The three deployed TEG(s) were procured from an ESC USAF Raytheon contract. During FY02, the Marine Corps brought control of the TEG program into Marine Corps System Command. A contract is in place with SPAWAR Charleston, SC to upgrade the TEG(s), conduct training, provide logistical support, sustainment and program management. Once a system baseline is established and tested, a MS C decision will be scheduled.

**(U) ACQUISITION STRATEGY TPCS:** TPCS, the ever-increasing sophistication of target threats and information technology necessitates an evolutionary acquisition approach. TPCS will make incremental improvements through maximum use of COTS, GOTS and NDI. These technology insertions and product improvements will ensure the Radio Battalions maintain cutting edge technologies and collection capabilities.

**(U) ACQUISITION STRATEGY TRSS:** Development will be competitive down selection process to two vendors for a Cost Plus Development Contract followed up with an award to one vendor with a FFP Production Contract. Air certification will be conducted in house at NAVAIR Patuxent River NAS, MD.

**(U) ACQUISITION STRATEGY TENCAP:** Work will be led in-house. Necessary contractor support will be acquired using already existing contracts.

**(U) ACQUISITION STRATEGY CIHEP:** CIHEP will use existing 8A contractor, Action Systems, the developer of the original system for test, evaluation and integration of planned refresh items for the ADP and Imagery Module. US Army IMA will be used for test, evaluation, and integration of planned refresh items for the TSS, Audio and Miscellaneous modules. CIHEP will coordinate acquisitions of communications equipment with PM Comm for planned upgrades to the Communications Module.

**(U) ACQUISITION STRATEGY MSIDS:** A complete refresh of the 73 MSIDS suites was completed in 1QTR FY03. Subsequent "block refreshes" beginning in FY04 are required in order to keep the systems from again becoming unreliable and unsupported. The block refresh approach will effectively leverage technological advances. Each block of upgrades will refresh 1/3 of the fielded components. A contract is in place with Northrop Grumman and Integrity Data Inc to provide configuration management, research and development and program management support.

**(U) ACQUISITION STRATEGY GCCS-I3:** The contract vehicle to be used is an existing Cost Reimbursable contract. An Intelligence Integration Facility has been established at the Integrated Team Solution Facility. As such, this facility will be used as the hub for the entire integration effort of the GCCS-I3 initiative. The program is funded for five years beginning in FY02 and, as it is not a procurement effort, there are no life cycle or acquisition phases for which the Marine Corps is responsible.

**(U) ACQUISITION STRATEGY TCAC:** The acquisition of components for the TCAC will maximize the use of existing equipment, NDI/COTS/GFE equipment/software. The integration effort for TCAC hardware components will be accomplished under the control of the SSA, MCSC. Software integration and support will be accomplished by contractors under the control of the Project Officer. These activities report to and are directed by the Program Manager, Intelligence Systems, Marine Corps Systems Command (MARCORSYSCOM). Maintenance support will be managed by MARCORLOGBASES Albany and MCSC, Albany and through separate contractual agreements.

**(U) ACQUISITION STRATEGY IBR:** In house contracts will be used to conduct engineering studies and test and evaluation activities associated with the Marine Corps implementation of the Integrated Broadcast Service, Common Message Format.

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**EXHIBIT R-2a, RDT&E Project Justification**

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**(U) ACQUISITION STRATEGY TPC:** TPC will continue Mods to system including the very large part of software/COTS upgrades. (Software will need security testing at each software upgrade).

**(U) ACQUISITION STRATEGY ISR:** The ISR Program is embracing the capabilities-based, evolutionary approach of the new DoD 5000 series guidance to allow for a quick and efficient insertion of technology to the MAGTF. Currently, full-time contractor support is provided by BAE Applied Technologies, Bulldog Technical Services, and MTC Services Corporation. All Contractor support is resident within the ITS facility.

**(U) ACQUISITION STRATEGY IAS:** The IAS program uses existing Government contracts for hardware and software development and integration. The system is comprised primarily of Commercial Off-the-Shelf (COTS) and Government Off-The-Shelf (GOTS) equipment.

**(U) E. MAJOR PERFORMERS:**

**MANPACK SIDS (MP SIDS)**

FY 04 Integrity Data Inc (IDI), Colorado Springs, Colorado. Provide funds for integration and sustainment support.

Northrop Grumman Information Technology (NGIT), Stafford, VA Provide funds for engineering and program management support.

FY 05 Integrity Data Inc (IDI), Colorado Springs, Colorado. Provide funds for integration and sustainment support.

Northrop Grumman Information Technology (NGIT), Stafford, VA Provide funds for engineering and program management support.

**INTELLIGENCE BROADCAST RECEIVER (IBR)**

FY 04 NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA Provide funds for Engineering and Program management support.

COMPUTER SCIENCE CORPORATION (CSC), Woodbridge, VA Provide funds to MDA Technologies for IBS Common Message format implementation assessment.

FY 05 NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Stafford, VA Provide funds for Engineering and Program management support.

COMPUTER SCIENCE CORPORATION (CSC), Woodbridge, VA Provide funds to MDA Technologies for IBS Common Message format implementation assessment.

**INTELLIGENCE ANALYSIS SYSTEM (IAS)**

FY 04 SPAWAR, CHARLESTON, S.C. Provide funds for improvement to GCCS-I3 software, joint interoperability testing, trade study for IOS server and clients and integration of JTT.

FY 05 SPAWAR, CHARLESTON, S.C. Provide funds for operational system development, joint interoperability, assessment and documentation and joint tactical terminal integration.

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**(U) E. MAJOR PERFORMERS:**

**TEAM PORTABLE COLLECTION SYSTEM - MULTI-PLATFORM CAPABLE (TPCS-MPC)**

FY 03 SPAWAR, CHARLESTON, S.C. Provide funds for prime systems integrator for TPCS-MPC EDM.

COMPUTER SCIENCE CORP, Dumfries, VA Funds provided for SETA support for Configuration Management (CM).

TITAN, Dumfries VA Funds provide Contractor Engineering Technical Support (CETS) at RadBn for training support and Independent Validation and Verification (IV&V) at 1st and 2nd RadBn.

FY04 COMPUTER SCIENCE CORP, Dumfries, VA Funds provided for SETA support for Configuration Management (CM).

FY 05 SPAWAR, CHARLESTON, S.C. Provide funds for prime systems integrator for TPCS-MPC EDM.

COMPUTER SCIENCE CORP, Dumfries, VA Funds provided for SETA support for Configuration Management (CM).

MARINE CORP OPERATIONAL TEST & EVALUATION ACTIVITY (MCOTEA), Quantico, VA Funds provides IOT&E.

TITAN, Dumfries VA Funds provide Contractor Engineering Technical Support (CETS) at RadBn for training support.

**GLOBAL COMMAND AND CONTROL SYSTEM INTEGRATED IMAGERY AND INTELLIGENCE (GCCS I3)**

FY 04 MTC Services Corporation (MTC) Stafford, VA. Provide funds for Engineering and Program support services.

Austin Information System (AIS), Austin, TX. Provide funds for Engineering support.

FY 05 MTC Services Corporation (MTC) Stafford, VA. Provide funds for Engineering and Program support services.

**COASTAL BATTLEFIELD RECONNAISSANCE AND ANALYSIS (COBRA)**

FY 03 NAVAL SEA WARFARE COMMAND (NSWC), Panama City, FL Provide funds for program and technical support.

NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Melbourne, FL Provide funds system engineering and development of Spiral A and Spiral B.

MARCORSYSCOM, (MCSC), Quantico, VA Provide funds for Program and technical support.

FY 04 NAVAL SEA WARFARE COMMAND (NSWC), Panama City, FL Provide funds for program and technical support.

NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Melbourne, FL Provide funds system engineering and development of Spiral A and Spiral B.

MARCORSYSCOM, (MCSC), Quantico, VA Provide funds for Program and technical support.

FY 05 NAVAL SEA WARFARE COMMAND (NSWC), Panama City, FL Provide funds for program and technical support.

NORTHROP GRUMMAN INFORMATION TECHNOLOGY (NGIT), Melbourne, FL Provide funds system engineering and development of Spiral A and Spiral B.

MARCORSYSCOM, (MCSC), Quantico, VA Provide funds for Program and technical support.

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**(U) E. MAJOR PERFORMERS:**

**TOPOGRAPHIC PRODUCTION CAPABILITY (TPC)**

- FY 03 MARCORSYSCOM, (MCSC), Quantico, VA Provide funds to Northrop Grumman Information Technology, TASC, for DII COE software segmentation Dec 02  
MARCORSYSCOM, (MCSC), Quantico, VA Provide funds for program office support under CEOSS contract Oct 02
- FY 04 MARCORSYSCOM, (MCSC), Quantico, VA Provide funds to Northrop Grumman Information Technology, TASC, for DII COE software segmentation Dec 03  
MARCORSYSCOM, (MCSC), Quantico, VA Provide funds for program office support under CEOSS contract Oct 03
- FY 05 MARCORSYSCOM, (MCSC), Quantico, VA Provide funds to Northrop Grumman Information Technology, TASC, for DII COE software segmentation Dec 03  
MARCORSYSCOM, (MCSC), Quantico, VA Provide funds for program office support under CEOSS contract Oct 03

**JOINT SURVEILLANCE TARGET ATTACK RADAR (JSTARS)**

- FY 03 SPAWAR, CHARLESTON, S.C. Provide funds for depot support, CGC integration and interoperability development.  
TBD, Provide funds for Acquisition and Technical support.
- FY 04 SPAWAR, CHARLESTON, S.C. Provide funds for depot support, CGC integration and interoperability development.  
TBD, Provide funds for Acquisition and Technical support.
- FY 05 SPAWAR, CHARLESTON, S.C. Provide funds for depot support, CGC integration and interoperability development.  
TBD, Provide funds for Acquisition and Technical support.

**JOINT SERVICE IMAGERY PROCESSING SYSTEM-TACTICAL EXPLOITATION GROUP (JSIPS-TEG)**

- FY 03 ARMY SPACE PROGRAM OFFICE, Washington, DC. Classified contract.  
MARCORSYSCOM, Quantico, VA. (MTC), Provide funds for Acquisition and Technical support.
- FY 04 ARMY SPACE PROGRAM OFFICE, Washington, DC. Classified contract.  
MARCORSYSCOM, Quantico, VA. (MTC), Provide funds for Acquisition and Technical support.
- FY 05 ARMY SPACE PROGRAM OFFICE, Washington, DC. Classified contract.  
MARCORSYSCOM, Quantico, VA. (MTC), Provide funds for Acquisition and Technical support.  
L3 COMM, Salt Lake City, UT. Provide funds for TIGDL development.

**TACTICAL CONTROL AND ANALYSIS CENTER (TCAC)**

- FY 04 TITAN, Fairfax, VA. Provide funds to develop additional analytical tools, integrate software changes and migrate software baseline to COE 4.x and beyond. Integrate new hardware/software into existing systems. Oct 03
- FY 05 TITAN, Fairfax, VA. Provide funds to develop additional analytical tools, integrate software changes and migrate software baseline to COE 4.x and beyond. Integrate new hardware/software into existing systems. Oct 04

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**(U) E. MAJOR PERFORMERS:**

**TACTICAL REMOTE SENSOR SYSTEM (TRSS)**

- FY03 NAWC, Crane IN. Funds to be provided towards the development of Low-Cost Imager (UGMS-I). Feb 03
- FY03 MODERN TECHNOLOGIES CORP., Springfield, VA. Funds to be provided for Alternative Life-Cycle Maintenance. Feb 03
- FY03 MARCORSYSCOM (MCSC), Quantico, VA. Funds to be provided for the development of the Advanced Air-Delivered Sensor (AADS). Mar 03
- FY03 NAVAIR, Patuxent River, MD. Funds to be provided to PM-265 to begin air certification process of the AADS store. Apr 03.
- FY03 OCEAN SYSTEMS ENGINEERING CORP. (OSEC), Carlsbad, CA. Funds to be provided for Software Development of UGMS Monitoring System. Apr 03.
- FY 04 OCEAN SYSTEMS ENGINEERING CORPORATION (OSEC), Carlsbad, CA. Funds to be provided for software development of the AADS, UGMS and VISTAS. Oct 04.
- FY04 MARCORSYSCOM (MCSC), Quantico, VA. Funds to be provided for the development of the AADS Store. Oct 04.
- FY04 MARCORSYSCOM (MCSC), Quantico, VA. Funds to be provided for the development of the VISTAS. Oct 04.
- FY04 NAVAIR, Patuxent River, MD. Funds to be provided for Consulting of AADS Store. Oct 04.
- FY05 MTC SERVICES CORPORATION, Chula Vista, CA. Funds to be provided for the continuation of development of mobile sensors. Dec 04.
- FY 05 OCEAN SYSTEMS ENGINEERING CORP (OSEC), Carlsbad, CA. Funds to be provided for software development of mobile sensors, VISTAS, and Air Relay/Recovery. Dec 04.
- FY05 MARCORSYSCOM (MCSC), Quantico, VA. Funds to be provided to continue the development of the VISTAS and Alternative power. Dec 04.
- FY05 NAVAIR, Patuxent River, MD. Funds to be provided for the development of the air relay/air recovery. Dec 04.

**COUNTERINTELLIGENCE AND HUMAN INTELLIGENCE (HUMINT) EQUIPMENT PROGRAM (CIHEP)**

- FY03 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided to Northrop Grumman IT, Stafford, VA for Program Management support for tech refresh and upgrade of program hardware and software Oct 02.
- FY03 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided to MTC Service Corp Dumfries, VA for Program Management support for tech refresh and upgrade of program hardware and software Oct 02.
- FY03 MARCORSYSCOM (MCSC), Quantico, VA. Program Management support for tech refresh and upgrade of program hardware and software Oct 02.
- FY03 ACTION SYSTEMS, Las Cruces, NM. Engineering, Integration and technical support for tech refresh and upgrade of program hardware and software Oct 02.
- FY04 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided to Northrop Grumman IT, Stafford, VA for Pgm Mgmt support for tech refresh and upgrade of program hardware and software Oct 03.
- FY04 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided to MTC Service Corp Dumfries, VA for Pgm Mgmt support for tech refresh and upgrade of program hardware and software Oct 03.
- FY04 MARCORSYSCOM (MCSC), Quantico, VA. Program Management support for tech refresh and upgrade of program hardware and software Oct 03.
- FY04 USAIMA, Fort Meade, MD. Engineering, Integration and technical support for tech refresh and upgrade of program hardware and software Oct 03.
- FY05 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided to Northrop Grumman IT, Stafford VA for Pgm Mgmt support for tech refresh and upgrade of program hardware and software Oct 04.
- FY05 MARCORSYSCOM (MCSC), Quantico, VA. Funds provided to MTC Service Corp Dumfries, VA for Pgm Mgmt support for tech refresh and upgrade of program hardware and software Oct 04.
- FY05 MARCORSYSCOM (MCSC), Quantico, VA. Program Management support for tech refresh and upgrade of program hardware and software Oct 04.
- FY 05 ACTION SYSTEMS, Las Cruces, NM. Engineering, Integration and technical support for tech refresh and upgrade of program hardware and software Oct 04.

Exhibit R-3 Cost Analysis						DATE: February 2004						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N /BA 7 Operational Sys Dev			0206313M Marine Corps Communications Sys			C2272 Intelligence C2 Systems						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TENCAP	Various	Titan	11.421	0.042	01/03	0.463	12/03	0.000	12/04	Cont.	Cont.	
TENCAP	TBD	TBD	0.685	0.000	03/03	0.015	12/03	0.000	12/04	Cont.	Cont.	
COBRA	RCP	MARCORSYSCOM	0.665	4.973	12/02					Cont.	Cont.	
COBRA	RCP	NG,Melbourne		0.272	10/03	1.610	01/04	7.645	01/05	Cont.	Cont.	
TPCS-MPC	WR	SPAWAR	1.931	0.404	12/02	0.348	11/04	0.743	01/05	Cont.	Cont.	
MSIDS	RCP	IDI				0.146	01/04	0.147	02/05	Cont.	Cont.	
CIHEP	RCP	Action Systems	0.031	0.096	12/02			0.035	12/04	Cont.	Cont.	
CIHEP	RCP	USAIMA				0.031	12/03			Cont.	Cont.	
CIHEP	RCP	NGIT		0.012	01/03	0.020	01/04	0.025	01/05	Cont.	Cont.	
CIHEP	RCP	MTC Service Corp		0.013	01/03	0.020	01/04	0.025	01/05	Cont.	Cont.	
CIHEP	RCP	MCSC	0.085	0.071	06/03	0.041	06/04	0.031	06/05	Cont.	Cont.	
TRSS-PIP	RCP	NAWC, Crane	1.000	2.366	02/03					Cont.	Cont.	
TRSS-PIP	RCP	ModernTC	0.329	0.180	02/03	0.000	01/04	0.280	12/04	Cont.	Cont.	
TRSS-PIP	RCP	OSEC	0.799	0.040	04/03	0.553	01/04	0.400	12/04	Cont.	Cont.	
TRSS-PIP	MIPR	ESC		0.615	04/03	1.500	01/04	2.000	12/04	Cont.	Cont.	
TRSS-PIP	MIPR	NAVAIR				0.805	01/04	4.150	12/04	Cont.	Cont.	
TRSS-PIP	RCP	ATMS		0.044	03/03						0.044	
TRSS-PIP	MIPR	Chicken Little				0.000	01/04	0.154	01/05		0.154	
IBR	RCP	NGIT				0.277	10/03	0.288	12/04	Cont.	Cont.	
IBR	RCP	CSC/MDA				0.754	10/03	0.722	10/04	Cont.	Cont.	
<b>Subtotal Product Development</b>			<b>16.946</b>	<b>9.128</b>		<b>6.583</b>		<b>16.645</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												

Exhibit R-3 Cost Analysis						DATE: February 2004						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N /BA 7 Operational Sys Dev			0206313M Marine Corps Communications Sys			C2272 Intelligence C2 Systems						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TENCAP	Various	Titan	5.784	2.757	10/02	2.413	12/03	3.000	12/04	Cont.	Cont.	
TENCAP	TBD	TBD	0.467	0.000	03/03	0.000	12/03	0.000	12/04	Cont.	Cont.	
COBRA	RCP	CSS	3.558	0.059	10/02	0.850	10/03	0.850	11/04	Cont.	Cont.	
COBRA	WR	BRTRC	0.366	0.006	12/02					Cont.	Cont.	
COBRA	WR	NAWC-AD	0.420	0.200	12/02					Cont.	Cont.	
COBRA	WR	NSWC	1.157	0.025	04/03					Cont.	Cont.	
COBRA	RCP	various				0.480	12/03	0.982	12/04	Cont.	Cont.	
COBRA	WR	NAVAIR						0.200	11/04	Cont.	Cont.	
JSIPS - TEG	WR	NSWC, Crane	0.377							Cont.	Cont.	
JSIPS - TEG	RCP	ASPO	0.485	0.485	10/02	0.400	10/03	0.355	10/04	Cont.	Cont.	
JSIPS - TEG	RCP	MCSC	1.644	1.644	01/03	1.815	01/04	0.940	01/05	Cont.	Cont.	
JSIPS - TEG	RCP	L3 COMM						0.940	1/05	Cont.	Cont.	
TPC	RCP	MCSC	0.650	0.044	12/02	0.191	12/03	0.132	12/04	Cont.	Cont.	
TPCS-MPC	RCP	MTC	0.561	0.000				0.392	01/05	Cont.	Cont.	
TPCS-MPC	RCP	CSC	1.284	0.884	04/03	0.126	12/03	0.525	01/05	Cont.	Cont.	
TPCS-MPC	MIPR	MCOTEA						1.094	01/05	Cont.	Cont.	
MSIDS	RCP	NGIT				0.050	01/04	0.050	01/05	Cont.	Cont.	
IAS MOD KIT	RCP	SPAWAR				0.470	10/03	0.288	10/04	Cont.	Cont.	
IAS MOD KIT	WR	SPAWAR				0.311	11/03	0.431	11/04	Cont.	Cont.	
IAS MOD KIT	WR	MTC				0.193	11/03	0.286	11/04	Cont.	Cont.	
GCCS I3	RCP	MTC				0.893	10/03	0.937	10/04	Cont.	Cont.	
GCCS I3	RCP	G2 Technology				0.628	10/03	0.596	10/04	Cont.	Cont.	
TCAC	RCP	BTG				0.890	10/03	0.904	10/04	Cont.	Cont.	
JSTARS	RCP	MTC	0.260	0.260	10/02	0.316	10/03	0.261	10/04	Cont.	Cont.	
JSTARS	WR	SPAWAR	0.100	0.100	11/02	0.338	01/04	0.483	01/05	Cont.	Cont.	

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APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
RDT&E, N /BA 7 Operational Sys Dev			0206313M Marine Corps Communications Sys			C2272 Intelligence C2 Systems						
IBR	RCP	CSC/MDA				0.100	10/03				Cont.	Cont.
TRSS-PIP	RCP	OSEC	0.201	0.000		0.200	12/03				Cont.	Cont.
TRSS-PIP	RCP	MilleniumTC	0.211	0.000		0.050	12/03	0.214	01/05		Cont.	Cont.
TRSS-PIP	RCP	NGIT	0.087	0.000		0.220	12/03				Cont.	Cont.
ISR	WR	MTC						1.068	01/05		Cont.	Cont.
<b>Subtotal Support</b>			<b>17.612</b>	<b>6.464</b>		<b>10.934</b>		<b>14.928</b>			<b>Cont.</b>	<b>Cont.</b>
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TPC	RCP	MCSC	0.189	0.189	10/02	0.207	10/03	0.215	10/04	Cont.	Cont.	
TPCS-MPC	RCP	TITAN	1.513	0.879	12/02			0.463	01/05	Cont.	Cont.	
MSIDS	RCP	IDI				0.024	01/04	0.025	01/05	Cont.	Cont.	
JSTARS	RCP	SPAWAR	0.050	0.050	10/03							0.100
<b>Subtotal T&amp;E</b>			<b>1.702</b>	<b>1.118</b>		<b>0.231</b>		<b>0.703</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MSIDS	RCP	NGIT				0.011	01/03	0.018	01/05	Cont.	Cont.	
JSTARS	RCP	MTC	0.166	0.166	10/03							0.332
PBD-290 OSD				7.253								
<b>Subtotal Management</b>			<b>0.166</b>	<b>7.419</b>		<b>0.011</b>		<b>0.018</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
<b>Total Cost</b>				<b>24.129</b>		<b>17.759</b>		<b>32.294</b>		<b>Cont.</b>	<b>Cont.</b>	

Exhibit R-4/4a Schedule Profile/Detail

DATE: February 2004

APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Sys Dev

PROGRAM ELEMENT  
0206313M Marine Corps Communications Sys

PROJECT NUMBER AND NAME  
C2272 Intelligence C2 Systems

COASTAL BATTLEFIELD RECONNAISSANCE AND ANALYSIS (COBRA)  
MILESTONE SCHEDULE

SCHEDULE OVERVIEW

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	Total
<b>Milestones</b>										
SD&D.Contract Award	4									
MS - B										
Spiral Development A										
Spiral Dev - B										
DT/OA										
MS - C										
Production										
IOT&E										
IOC										
Tech Insertion										
<b>Systems Procured</b>							1	1	1	

System = 1 Ground Station, 2 Payloads  
AAO = 9 Systems

Program Funding Summary  
(APPN, BLI #, NOMEN)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N	5.535	2.940	9.677	6.390	3.423	1.656	1.110	Continuing	Continuing
(U) PMC BLI# 474700 Intell Supp Eq COBRA	0	0	0	1.210	1.817	3.227	0.250	Continuing	Continuing



Exhibit R-4/4a Schedule Profile/Detail

DATE:

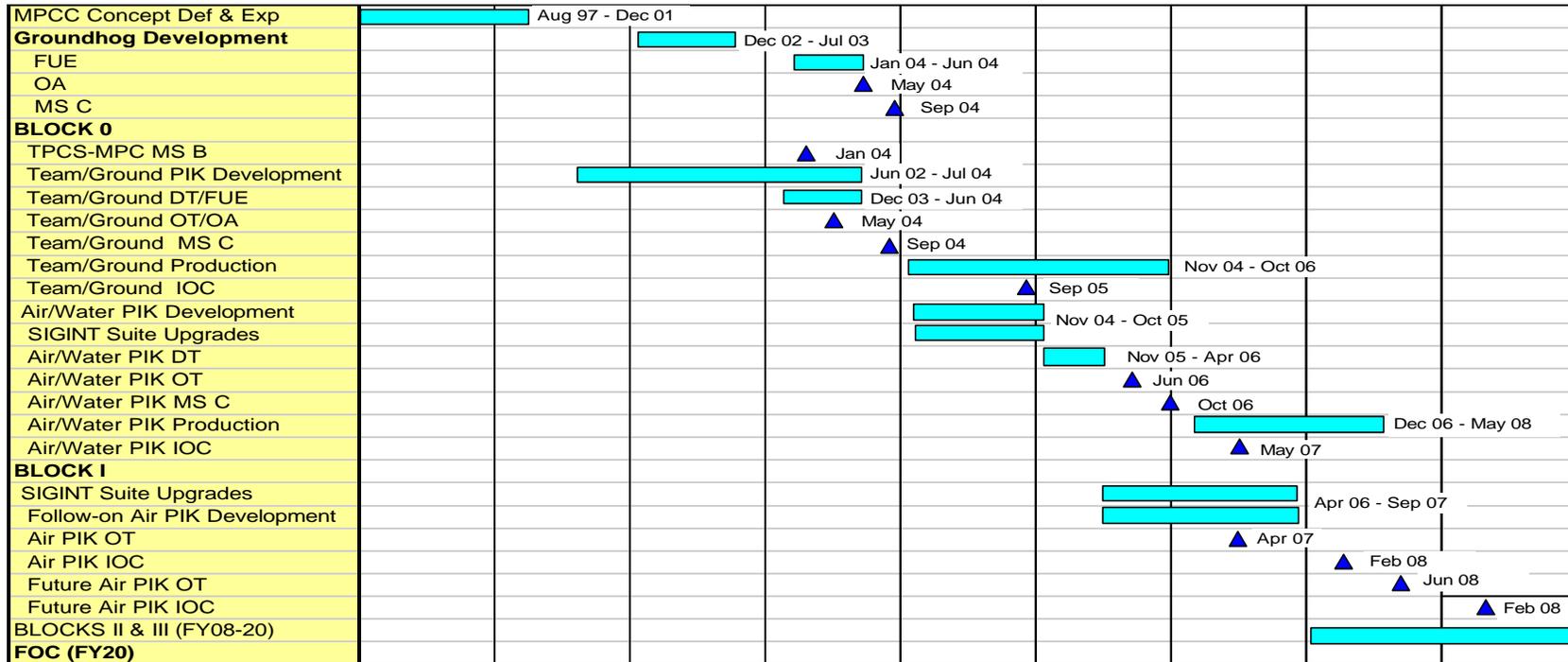
February 2004

APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Sys Dev

PROGRAM ELEMENT  
0206313M Marine Corps Communications Sys

PROJECT NUMBER AND NAME  
C2272 Intelligence C2 Systems

TPCS - MPC Milestone Schedule



**Program Funding Summary**

(APPN, BLI #, NOMEN)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N	2.167	0.474	3.217	2.607	3.499	2.806	1.501	Continuing	Continuing
(U) PMC BLI# 474700 Intell Sup (TPCS)	0	0	6.360	8.038	7.746	5.936	0.299	Continuing	Continuing

Exhibit R-4/4a Schedule Profile/Detail

DATE: February 2004

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Dev	0206313M Marine Corps Communications Sys	C2272 Intelligence C2 Systems

TPCS-MPC SCHEDULE DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
MS B EDM Dev and Demo			2Q					
DT/OA		3Q-----2Q						
IOT & E			3Q					
MS C			4Q					
Ground/Team PIK IOC				4Q				
Air/Water PIK OT					3Q			
Air/Water PIK MS C						1Q		
Air/Water PIK IOC						3Q		
CH-53 OT						3Q		
CH-53 IOC							2Q	
MV-22 OT							3Q	
MV-22 IOC								2Q

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

**February 2004**

APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N/BA-7 Operational Sys Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Sys</b>					PROJECT NUMBER AND NAME <b>C2273 Air Operations C2 Systems</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost To Complete	Total Program
Project Cost	<b>62.275</b>	<b>94.832</b>	<b>99.834</b>	<b>81.526</b>	<b>105.786</b>	<b>31.135</b>	<b>19.923</b>	<b>Cont</b>	<b>Cont</b>
RDT&E Articles Qty									

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

(U) Air Operations C2 coordinates and plans Navy and Marine air combat operations and interfaces with joint and combined forces air operations. It also interfaces with fire support C2. The systems in this project are used to detect aircraft and missiles, process the detected information, deliver the processed information to the Advanced Tactical Air Command Central (ATACC), and conduct the air battle.

- The Air Defense Communications Platform (ADCP) PIP provides a platform for the AN/TPS-59(V)3 radar and the Tactical Air Operations Module (TAOM) for tactical ballistic missile defense as a JTIDS network user. The ADCP provides a direct interface between the AN/TPS-59 (V)3 to the joint services.
- The Aviation Radar (AN/TPS-59) is a "congressionally mandated" national asset. It is the only fielded ground based sensor which can detect and track Theater Ballistic Missiles at ranges of 400 nautical miles, for 360 degrees up to one million feet in elevation. Funding for this program has moved to Project C3099 within this Program Element (PE) FY04.
- The Common Aviation Command and Control System (CAC2S) will provide a common baseline of equipment, computer hardware, and software required to perform the mission of the Marine Air Command and Control System (MACCS). CAC2S will provide a complete and coordinated modernization effort for the equipment of the MACCS to support its employment in an Operational Maneuver from the Sea (OMFTS) environment. The CAC2S will eliminate the current dissimilar aviation Command & Control systems, and will add the capability for aviation combat direction and air defense functions. CAC2S will be comprised of standardized tactical facilities, hardware, software and will significantly reduce the physical size and logistical footprint of existing MACCS equipment suite. Utilizing common hardware, the CAC2S will be an open architecture system that will migrate to the Defense Information Infrastructure Common Operating Environment (DII COE). Furthermore, CAC2S will execute real time functions of controlling aircraft and missiles, and employing weapon systems against time critical targets.  
CAC2S will provide a capability that allows operators to integrate Marine aviation into joint and combined air/ground operations. CAC2S will provide the tools that perform aviation C2 planning and execution functions in a positive control environment. CAC2S will assimilate the missions and fiscal resources of the Tactical Air Operations Center (TAOM), Tactical Air Command Center and the Direct Air Support Center (DASC) and the Air Defense Communications Platform (ADCP).
- The Composite Tracking Network (CTN), formerly known as Cooperative Engagement Capability (CEC), enables all CTN and CEC equipped, Anti-Air Warfare (AAW) weapons systems in a battle force to operate as a single, distributed AAW weapon system. This is accomplished providing timely sharing of fire control quality sensor data, correlated identification data, and AAW weapons management status. The sensor networking capability of CTN essentially allows forces to have a direct connection to the various sensors supported by forces throughout a battlefield enabling the development of a common understanding of the air situation. CTN consists of common processing units that interface with local and remote sensor data in order to develop a common track database and data communications pieces that enable the connectivity and networking of the sensors and processors. Funding for this program in FY02 and FY03 is found in Project C2278 with this PE.
- The Critical Infrastructure will develop a new capability for video conferencing capability via service intranet capabilities.
- The MACCS Sustainment consists of various command and control agencies designed to provide the Aviation Combat Element (ACE) commander with the ability to monitor, supervise and influence the application of Marine aviation assets in support of MAGTF operations. The MACCS Sustainment provides funding to keep these legacy agencies ready, relevant and capable until their functions are replaced by the Common Aviation Command and Control System (CAC2S).
- "SIAP is the product of fused, common, continual, unambiguous tracks of airborne objects within the surveillance area." The Single Integrated Air Picture (SIAP) Systems Engineer Task Force will investigate, research and produce the most cost effective means for producing a SIAP. The SIAP System Engineer Task Force (SETF) is not limited to just material solutions in this effort; all aspects will be considered for recommendation to produce the SIAP including tactics, techniques and procedure changes to Service operations. Funding for this program in FY03 is found in C2270 within this PE.

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EXHIBIT R-2a, RDT&E Project Justification

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**February 2004**

APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Sys</b>	PROJECT NUMBER AND NAME <b>C2273 Air Operations C2 Systems</b>
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8. Theater Battle Management Core Systems (TBMCS) provides the commander the automated tools necessary to generate, disseminate, and execute the Air Tasking Order (ATO), as mandated by the Chairman, Joint Chiefs of Staff in July 1993. It is an evolutionary acquisition, allowing for the rapid development/fielding of hardware and software to meet today's rapidly advancing technology. It is fielded to all four Marine Tactical Air Command Squadrons (MTACS) and the supporting establishment with Marine Aviation Weapons and Tactics School (MAWTS) and the Battlestaff Training Facility (BSTF) sharing a system.

9. The Unit Operations Center (UOC) project develops and transitions two Command and Control Imperative Advanced Technology Demonstration (ATDs) (the Expeditionary Integrated Combat Operations Center ) and the Joint Tactical Communications ((JT COMMs) ATDs) into various Marine Corps and Joint Engineering and Manufacturing Development (E&MD) efforts. UOC development efforts focus on: Cognitive Task Analysis (CTA); enhanced ergonomic physical design; evaluation of advanced multimedia hardware; integration and networking with advanced development communication systems; and advanced software development to support systems integration and advanced battlefield visualization concepts. UOC developments are tailored to support transition of software and hardware developments as PIPs to the established MAGTF C4I baseline. Unit Operations Center (UOC) will provide a facility and components for the integration of current and planned battlefield automation systems.

It will be, in essence, a "system of systems" designed to optimize the positioning, interaction, and flow of information among the various staff agencies (G-2, G-3, Operations Directorate, etc.) and their automated information systems and between the unit and higher, adjacent or subordinate units or headquarters. The Marine Corps deploys Component/Joint Task Force (JTF/Marine Air Ground Task Force (MAGTF)) command elements throughout the world to fulfill operational requirements, often in joint/combined forces arenas. The UOC is designed in garrison and tactical versions. The tactical version is called the Combat Operations Center (COC) which is an outgrowth of the integrated COC (ICOC), COC-Interim (COC(I)), and the Enhanced COC (ECOC) developments over the last two years. The garrison version is called the Command Center (CC). Funding for this program in FY02 and FY03 is found in C2270 within this PE.

**(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:**

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.219</b>	<b>0.097</b>	<b>0.034</b>
RDT&E Articles Qty			

**ADCP:** Tested and certified software enhancements.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.200</b>	<b>0.094</b>	<b>0.085</b>
RDT&E Articles Qty			

**ADCP:** Software enhancements to meet ADCP ORD requirements.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.915</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**AN/TPS-59:** Develop ECPs for software improvements. Funding for this program has moved to Project C3099 within this PE.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.500</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**AN/TPS-59:** Develop Automatic False Alarm Reduction (FAR) software. Funding for this program has moved to Project C3099 within this PE.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>2.100</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**AN/TPS-59:** Investigate Advanced Technologies to incorporate into the antenna. Funding for this program has moved to Project C3099 within this PE.

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>		<b>C2273 Air Operations C2 Systems</b>
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.555</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>AN/TPS-59:</b> Adjustment for PBD 290. Funding for this program has moved to Project C3099 within this PE.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>3.032</b>	<b>4.697</b>	<b>5.189</b>
RDT&E Articles Qty			
<b>CAC2S:</b> Program management support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>41.910</b>	<b>53.578</b>	<b>51.862</b>
RDT&E Articles Qty			
<b>CAC2S:</b> SDD. Engineering Development Model (EDM) hardware and software development, design of host processing system, and conduct software integration of Joint mandated applications, developmental testing and evaluation and baseline stabilization.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>3.130</b>	<b>3.649</b>	<b>7.646</b>
RDT&E Articles Qty			
<b>CAC2S:</b> System development, GFE, and testing in accordance with continued sensor interface/integration, communications interface/interoperability development.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.834</b>	<b>1.164</b>
RDT&E Articles Qty			
<b>CTN:</b> Software development: Interface Design Document (IDD) development for CAC2S and CLAWS interface to CTN.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>6.198</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CTN:</b> Development of Engineer Design Model.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.919</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CTN:</b> Testing and Evaluation: Developmental testing support. Certification of CAC2S and CLAWS interfaces to CTN.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.530</b>	<b>0.610</b>
RDT&E Articles Qty			
<b>CTN:</b> Program management support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>1.420</b>
RDT&E Articles Qty			
<b>CTN:</b> IV&V of the certified system with interfaces to CAC2S and CLAWS.			

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>		<b>C2273 Air Operations C2 Systems</b>
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>2.111</b>
RDT&E Articles Qty			
<b>CTN:</b> Finalize Engineer Development Model for production design. Funding for this effort in FY02 and FY03 is provided under Project C2278 within this PE.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.894</b>	<b>1.500</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CRITICAL INFRASTRUCTURE:</b> VTC Coop Engineering.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.364</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>DISM:</b> Research and demonstrate a variety of development initiatives which will be compatible with current DISM systems.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.022</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MACCS SUSTAINMENT:</b> Test and evaluation on the DASC Airborne SLEP.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.899</b>	<b>0.273</b>	<b>1.452</b>
RDT&E Articles Qty			
<b>MACCS SUSTAINMENT:</b> Planned software upgrades for the TAOM, JTIDS and TACC, DASC.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.290</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MACCS SUSTAINMENT:</b> Program management support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>3.123</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MACCS SUSTAINMENT:</b> Multi-Source Correlation System software development.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>2.000</b>	<b>3.193</b>
RDT&E Articles Qty			
<b>MACCS SUSTAINMENT:</b> Test and Evaluation for TAOM tech insert and interoperability.			

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EXHIBIT R-2a, RDT&E Project Justification

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>		<b>C2273 Air Operations C2 Systems</b>
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.094</b>	<b>1.150</b>
RDT&E Articles Qty			
<b>MACCS SUSTAINMENT:</b> Technology integration efforts for TAOM.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>5.960</b>	<b>7.833</b>
RDT&E Articles Qty			
<b>SIAP:</b> Service System Engineering support to SIAP System Engineer Task Force.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.778</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>SIAP:</b> Update MCTSSA SIE HWILT (AVN C2) hardware and software to reflect SIAP changes.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.200</b>	<b>1.115</b>
RDT&E Articles Qty			
<b>SIAP:</b> Engineering and analysis for SIAP system engineer Support.Funding for this program in FY03 is provided under Project C2270 within this PE.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.264</b>	<b>0.466</b>	<b>0.437</b>
RDT&E Articles Qty			
<b>TBMCS:</b> USMC TBMCS development.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.033</b>	<b>0.035</b>
RDT&E Articles Qty			
<b>TBMCS:</b> MCTSSA TBMCS software support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.413</b>	<b>0.255</b>	<b>0.279</b>
RDT&E Articles Qty			
<b>TBMCS:</b> Program management support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>7.478</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>UOC:</b> Continue engineering and manufacturing development effort of production representative modules to include UOC Universal Communications Interface Module (UCIM).			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>8.663</b>
RDT&E Articles Qty			
<b>UOC:</b> Engineering and manufacturing development effort including design of production representative modules to include UOC Universal Communications Interface Module (UCIM).			

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EXHIBIT R-2a, RDT&E Project Justification

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**February 2004**

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
<b>RDT&amp;E, N/BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>		<b>C2273 Air Operations C2 Systems</b>	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.644</b>	<b>1.758</b>	
RDT&E Articles Qty				
<b>UOC: Program Management Support</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>3.798</b>	
RDT&E Articles Qty				

**UOC:** Configuration analysis for CSSE, CE, and FICCS Unit Operations Centers. Support wireless technology upgrade, web-based training tool, and rotary generator.

Funding for this effort in FY03 is provided under Project C2270 within this Program Element (PE).

<b>(U) Total \$</b>		<b><u>62.275</u></b>		<b><u>94.832</u></b>		<b><u>99.834</u></b>			
<b>(U) FY 2004 President's Budget:</b>	<b>65.142</b>	<b>95.971</b>	<b>106.936</b>						
<b>(U) Adjustments from the President's Budget:</b>									
(U) Congressional/OSD Program Reductions									
(U) PBD 290									
(U) Congressional Rescissions									
(U) Congressional Increases	1.364	1.500							
(U) Reprogrammings	-2.598	-1.562	-6.184						
(U) SBIR/STTR Transfer	-1.633								
(U) Minor Affordability Adjustments		-1.077	-0.918						
<b>(U) FY 2005 NAVCOMPT Budget:</b>	<b>62.275</b>	<b>94.832</b>	<b>99.834</b>						
<b>CHANGE SUMMARY EXPLANATION:</b>									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b>									
<u>Line Item No. &amp; Name</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC, BLI#462000, ADCP PIP	0.804	0	0	0	0	0	0	0	0.804
(U) PMC, BLI#464000, ADCP PIP	0	0.275	0.175	0.055	0	0	0	0	0.505
(U) PMC, BLI #463600, AN/TPS-59	11.163	0	0	0	0	0	0	0	11.163
(U) PMC, BLI #465100, AN/TPS-59	0	18.077	24.466	7.461	11.933	0	0	Continuing	Continuing
(U) PMC, BLI #468900, CAC2S	0	0	0	3.899	39.139	41.755	41.905	Continuing	Continuing
(U) PMC, BLI #464000, CEC/CTN	0	0	0.000	22.477	34.840	43.993	68.803	Continuing	Continuing
(U) PMC, BLI #464000, MACCS SUSTAINMENT	4.159	3.993	6.641	11.891	1.870	1.416	1.345	0	31.315
(U) PMC, BLI #464000,TBMCS (CTAPS)	1.665	6.443	3.474	3.605	3.628	3.746	3.818	Continuing	Continuing
(U) PMC, BLI #463100, UOC	25.241	0	0	0	0	0	0	0	25.241
(U) PMC, BLI #419000, UOC	0	29.010	35.933	30.109	54.471	96.523	112.784	Continuing	Continuing

**UNCLASSIFIED**

EXHIBIT R-2a, RDT&E Project Justification

DATE:

**February 2004**

APPROPRIATION/BUDGET ACTIVITY

**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME

**0206313M Marine Corps Communications Sys**

PROJECT NUMBER AND NAME

**C2273 Air Operations C2 Systems**

**(U) D. ACQUISITION STRATEGY:**

(U) **ADCP:** PM AD has an In Service Engineering Assessment (ISEA) with Crane. As part of the ISEA, Crane is tasked to develop, produce, and implement Engineering Change Proposals, or mods as identified in the new DOD 5000. In this case the Multi-Channel Interface (MCIU) interface to the TAOM (V)4 providing a Joint Tactical Data Link (TADIL J) capability to the TAOM (V)4 is being produced.

(U) **AN/TPS 59:** Perform research and development for electronic protection and continuing resolution of Diminishing Manufacturing Sources (DMS) as well as replacement of transmitters on the 12 arrays over the FYDP.

(U) **CAC2S:** The contracting strategy is centered on a family of options that will be exercised from PDRR through production based on contractor performance. The base contract is for PDRR and there will be options for SDD and Production. The PDRR contract is a Cost Plus Fixed Fee for 12 month period. Following the PDRR phase, an option for the SDD phase will be exercised. The ESDD will be Cost Plus Award Fee. After successful completion of SDD, a production option will be exercised. The production contracts will be Firm Fixed Price Successive Targets (Modified).

(U) **CRITICAL INFRASTRUCTURE:** The program will be executed under Government Works contract by evaluating proposals that will be compatible with DVS-G and service programs.

(U) **MACCS SUSTAINMENT:** The Direct Air Support Central (Airborne) Abbreviated Acquisition Program is utilizing a sole-source strategy with Computing Devices Canada, an owned subsidiary of General Dynamics, for procurement of Communications Distribution System equipment. Prototype development and system integration will be conducted by Naval Surface Weapons Center, Crane, IN.

(U) **CTN:** The USMC's CTN acquisition strategy is to participate in the USN's program procurement and testing, making necessary modifications to support the Marine Corps' requirement.

(U) **SIAP** is a systems engineering effort that will be utilized to reduce risk and increase interoperability for legacy and future C4ISR systems.

(U) **TBMCS:** TBMCS is an ACAT 1AC, USAF Program with joint interest/oversight. It was mandated by the Chairman, Joint Chiefs of Staff in July 93 for Air Tasking Order (ATO) Interoperability among all Services. The USMC will not be letting any competitive contracts for TBMCS, but following the USAF lead, utilizing USAF TBMCS contracts and fielding only the joint modules of TBMCS. As USMC unique requirements are identified and funded, they will be provided to the USAF (to include funding) for inclusion within TBMCS utilizing the USAF cost plus fixed fee contract.

(U) **UOC:** The UOC COC is a Competitively Awarded Contract for design (cost type) and FFP production options.

**UNCLASSIFIED**

EXHIBIT R-2a, RDT&E Project Justification

DATE:

**February 2004**

APPROPRIATION/BUDGET ACTIVITY

**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME

**0206313M Marine Corps Communications Sys**

PROJECT NUMBER AND NAME

**C2273 Air Operations C2 Systems**

**(U) E. Major Performers:**

**(U) AN/TPS-59** Lockheed Martin Corp., Syracuse, NY. FY02 awarded Jan 02 for the AN/TPS-59 program to develop ECPs to incorporate electronic protection and new transmitters for the antenna and to initiate ECP false alarm adaption software. FY03 contract with LMC in Mar 03 to develop ECPs for software and hardware improvements.

**(U) AN/TPS-59** Sensis Corp., DeWitt, NY. FY02 awarded Jan 02 for the engineering, analysis, and technical support for AN/TPS-59 program, on such efforts as National Systems Cueing, Mission Planner, and Remote Environmental Simulator (RES) Obsolescence Evaluation and Repair and Return. FY03 contract with Sensis Corp. in Mar 03 for technical engineering, manufacturing, and test support for composite materials -risk reduction.

**UNIT OPERATIONS CENTER (UOC)**

FY03 General Dynamics Decision Systems, Scottsdale AZ. System development, demonstration, integration, test and evaluation. Apr 03.

FY04 General Dynamics Decision Systems, Scottsdale AZ. System development, demonstration, integration, test and evaluation. Apr 04.

FY05 General Dynamics Decision Systems, Scottsdale AZ. System development, demonstration, integration, test and evaluation. Apr 05.

FY05 SPAWAR, Charleston SC. Support Services. Jan 05

**COMMON AVIATION COMMAND AND CONTROL SYSTEM (CAC2S)**

FY03 Raytheon E-Systems, San Diego, CA. System development, demonstration, integration, test and evaluation. May 03.

FY04 Raytheon E-Systems, San Diego, CA. System development, demonstration, integration, test and evaluation. May 04.

FY05 Raytheon E-Systems, San Diego, CA. System development, demonstration, integration, test and evaluation. May 05.

**COMPOSITE TRACKING NETWORK (CTN)**

FY04 NSWC Crane, IN. Mobility platform integrator. Jan 04

FY04 Lockheed Martin, Syracuse NY. Radar integration. Jan 04

FY05 NSWC Crane In. Mobility platform integrator. Jan 05

**CRITICAL INFRASTRUCTURE**

FY03 Government Works, Headquarters, Herndon, VA. Mar 03

**MACCS SUSTAINMENT**

FY03 Northrop Grumman, Woodland Hills, CA. Engineering services. Jan 03

FY04 Northrop Grumman, Woodland Hills, CA. Engineering services. Jan 04 Engineering services. Jan 04

FY05 Mission Research. Engineering and software services. Jan 05

**SINGLE INTEGRATED AIR PICTURE (SIAP)**

FY04 RNB Technologies, Inc., Stafford, VA Engineering services. Jan 04

FY05 RNB Technologies, Inc., Stafford, VA Engineering services. Jan 05

**CLASSIFICATION:**

Exhibit R-3 Cost Analysis				DATE: <b>February 2004</b>								
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206313M Marine Corps Communications Sys				C2273 Air Operations C2 Systems					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CAC2S	WR	Center Charleston, SC	6.827	0.642	03/03	0.600	01/04	0.594	01/05	Continuing	Continuing	
CAC2S	RCP	Raytheon, San Diego CA	4.645	42.470	06/03	53.578	01/04	51.862	01/05	Continuing	Continuing	
CAC2S	RCP	SPAWAR	0.882	0.846	02/03	0.847	01/04	0.847	01/05	Continuing	Continuing	
CAC2S	RCP	EMA, Inc.	0.126								0.126	0.126
ADCP	WR	NSWC Crane, IN	1.853	0.419	03/03	0.123	03/04	0.084	01/05	Continuing	Continuing	
MACCS SUSTAINMENT	WR	NSWC Crane, IN	0.695	1.432	04/03	0.866	03/04	0.498	01/05	Continuing	Continuing	
MACCS SUSTAINMENT	CPFF	Lockheed				1.290	01/04	2.773	01/05	Continuing	Continuing	
MACCS SUSTAINMENT	CPFF	Litton, Woodland, CA	1.531	2.219	02/03						3.750	
MACCS SUSTAINMENT	RCP	NGIT, Reston, VA		0.024	12/02						0.024	
MACCS SUSTAINMENT	RCP	CRC Van Nuys, CA	0.174	0.284	10/02						0.458	
MACCS SUSTAINMENT	CPFF	MRC, Ft Worth, TX		0.100	06/03			2.524	01/05	Continuing	Continuing	
MACCS SUSTAINMENT	WR	Hill AFB, Utah		0.121	10/02						0.121	
MACCS SUSTAINMENT	RCP	Mevatec		0.027	03/03						0.027	
SIAP	RCP	MCSC, Quantico, VA	11.400			8.938	01/04	8.948	01/05	Continuing	Continuing	
AN/TPS-59	C/CPFF	Lockheed,Syracuse NY	22.946	3.625	03/03	0.555	01/04			Continuing	Continuing	
AN/TPS-59	T&M	Sensis	5.907	1.303	03/03					Continuing	Continuing	Continuing
AN/TPS-59	RCP	MCTSSA, CPndltn, CA		0.020	05/03						0.020	
TBMCS	MIPR	ESC, Hanscom AFB	0.673					0.246	01/05	Continuing	Continuing	
TBMCS	WR	NSWC, Crane, IN		0.359	06/03	0.151	03/04	0.191	01/05	Continuing	Continuing	
CTN	WR	NSWC, Crane, IN	1.955			7.440	01/04	2.060	01/05	Continuing	Continuing	
CTN	RCP	Raytheon	0.365			0.700	01/04	1.000	01/05	Continuing	Continuing	
CTN	RCP	Solipsys	1.031			0.050	01/04	0.215	01/05	Continuing	Continuing	
CTN	RCP	Lockheed	0.482			0.500	01/04			Continuing	Continuing	
CTN	WR	NSWC Dahlgren	0.590			0.025	01/04	1.420	01/05	Continuing	Continuing	
UOC	WR	SPAWAR	4.891			0.702	01/04	3.798	01/05	Continuing	Continuing	
UOC	WR	MCSC, Quantico, VA	1.412			0.320	01/04			Continuing	Continuing	
UOC	RCP	General Dynamics				7.478	01/04	8.663	01/05	Continuing	Continuing	
CRITICAL INFRASTRUCTURE	RCP	SSC Charleston		0.876	06/03						0.876	
CRITICAL INFRASTRUCTURE	WR	SSC Charleston		1.018	06/03	1.500	01/04				2.518	
<b>Subtotal Product Development</b>			<b>68.385</b>	<b>55.785</b>		<b>85.663</b>		<b>85.723</b>		<b>Continuing</b>	<b>Continuing</b>	
Remarks:												

**CLASSIFICATION:**

Exhibit R-3 Cost Analysis							DATE: <b>February 2004</b>					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206313M Marine Corps Communications Sys				C2273 Air Operations C2 Systems					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 03 Cost to Complete	FY 03 Total Cost	Target Value of Contract
CAC2S	WR	MCSC, Quantico, VA	0.299	0.200	10/02	0.200	01/04	0.200	01/05	Continuing	Continuing	0.321
CAC2S	RCP	MCSC, Quantico, VA						4.748	01/05	Continuing	Continuing	
CAC2S	WR	MCTSSA, CPndltn,CA	0.090	0.007	10/02			1.983	01/05	Continuing	Continuing	
CAC2S	WR	MCLB Albany GA	0.021								0.021	
CAC2S	WR	3 <sup>rd</sup> MAW San Diego, CA	0.016								0.016	
CAC2S	WR	NSWC Crane, IN	1.133	0.207	06/03	0.173	01/04	0.313	01/05	Continuing	Continuing	
CAC2S	WR	SPAWAR San Diego, CA				2.687	01/04			Continuing	Continuing	
CAC2S	WR	MAGCC, 29 Palms, CA	0.022	0.005	02/03						0.027	
CAC2S	WR	1st MAW		0.010	11/02						0.010	
CAC2S	WR	NAWC, Orlando, FL		0.040	02/03						0.040	
CAC2S	WR	NFESC, Port Hueneme		0.130	04/03						0.130	
CAC2S	RCP	MCOTEA	0.250	0.130	01/03	0.130	01/04	0.400	01/05	Continuing	Continuing	
MACCS Sustainment	WR	MCTSSA, CPndltn,CA				0.150	01/04			Continuing	Continuing	
MACCS Sustainment	RCP	NSWC, Crane	0.000	0.070	11/03					0.000	0.070	
MACCS Sustainment	WR	MCSC	0.033	0.057	03/03					0.000	0.090	0.033
ADCP	WR	MCTSSA, CPndltn,CA	0.211			0.038	01/04	0.035	01/05	Continuing	Continuing	
ADCP	WR	MCSC, Quantico, VA	0.070			0.030	01/04			Continuing	Continuing	
TBMCS	MIPR	GSA, Bremerton, WA		0.193	10/02					0.000	0.193	0.193
TBMCS	WR	MCTSSA, CPndltn,CA	0.083					0.035	01/05	Continuing	Continuing	
TBMCS	WR	3rd MAW EI Toro, CA	0.075			0.015	01/04			Continuing	Continuing	
TBMCS	WR	MCSC, Quantico, VA	0.205	0.050	10/02	0.040	01/04			Continuing	Continuing	
TBMCS	WR	MarForRes NO, LA	0.009	0.020	01/03	0.015	01/04			Continuing	Continuing	
TBMCS	WR	CW, 1st MAW	0.001	0.020	03/03	0.015	01/04			Continuing	Continuing	
TBMCS	MIPR	ESC, Hanscom AFB			01/03	0.273	01/04			Continuing	Continuing	
TBMCS	WR	2nd MAWCh Pt, NC				0.015	01/04			Continuing	Continuing	
CTN	WR	MCLB Albany GA	0.020			0.010	01/04			Continuing	Continuing	
CTN	MIPR	STA	0.432			0.160	01/04			Continuing	Continuing	
CTN	WR	CG 1 <sup>st</sup> MAW	0.014			0.005	01/04			Continuing	Continuing	
CTN	WR	MCSC, Quantico, VA	0.085			0.040	01/04			Continuing	Continuing	
DISM	WR	NSWC, Dahlgren, VA		0.075	06/03						0.075	
DISM	RCP	NSWC, Dahlgren, VA		1.169	07/03						1.169	
DISM	WR	MCSC, Quantico, VA		0.120	06/03						0.120	
<b>Subtotal Support</b>			<b>3.069</b>	<b>2.503</b>		<b>3.996</b>		<b>7.714</b>		<b>Continuing</b>	<b>Continuing</b>	

Remarks:

**CLASSIFICATION:**

Exhibit R-3 Cost Analysis	DATE: <b>February 2004</b>
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APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
<b>RDT&amp;E, N /BA 7 Operational Sys Dev</b>			<b>0206313M Marine Corps Communications Sys</b>				<b>C2273 Air Operations C2 Systems</b>					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 03 Cost to Complete	FY 03 Total Cost	Target Value of Contract
MACCS Sustainment	RCP	MCTSSA, CPndltn,CA				0.061	01/04			Continuing	Continuing	
CTN	WR	MCTSSA, CPndltn,CA	0.003			0.032	01/04			Continuing	Continuing	
CTN	WR	MACS-24	0.087			0.012	01/04			Continuing	Continuing	
CTN	WR	DCMC	0.022			0.002	01/04			Continuing	Continuing	
CTN	WR	Port Hueneme	0.018			0.018	01/04			Continuing	Continuing	
CAC2S		MCOTEA		0.130								
<b>Subtotal T&amp;E</b>			<b>0.130</b>	<b>0.130</b>		<b>0.125</b>		<b>0.000</b>		<b>Continuing</b>	<b>Continuing</b>	

Remarks:

Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	FY 03 Cost to Complete	FY 03 Total Cost	Target Value of Contract
TBMCS	CPFF	Logicon	0.484	0.035	06/03	0.230	01/04	0.279	01/05	Continuing	Continuing	
CAC2S	IDIQ	NGIT, Reston, VA	3.535	2.957	06/03	3.459	01/04	3.500	01/05	Continuing	Continuing	
CAC2S	FFP	Mevatec, Crstl City VA	0.479	0.027	03/03	0.250	01/04	0.250	01/05	Continuing	Continuing	
CAC2S	RCP	Humphreys, Orange, CA		0.008	04/03						0.008	
CAC2S	RCP	KCI	0.199	0.203	05/03						0.402	
CAC2S	RCP	MKI		0.060	01/03						0.060	
CTN	IDIQ	Logicon	0.591			0.487	01/04	0.610	01/05	Continuing	Continuing	
UOC	IDIQ	Logicon	3.396			0.522	01/04	1.758	01/05	Continuing	Continuing	
UOC	FFP	Mevatec, Crstl City VA	0.064			0.100	01/04			Continuing	Continuing	
AN/TPS-59	WR	MCSC, Quantico, VA		0.567	01/03						0.567	
<b>Subtotal Management</b>			<b>8.748</b>	<b>3.857</b>		<b>5.048</b>		<b>6.397</b>		<b>Continuing</b>	<b>Continuing</b>	

Remarks:

<b>Total Cost</b>				<b>62.275</b>		<b>94.832</b>		<b>99.834</b>		<b>Continuing</b>	<b>Continuing</b>	
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Exhibit R-4/4a

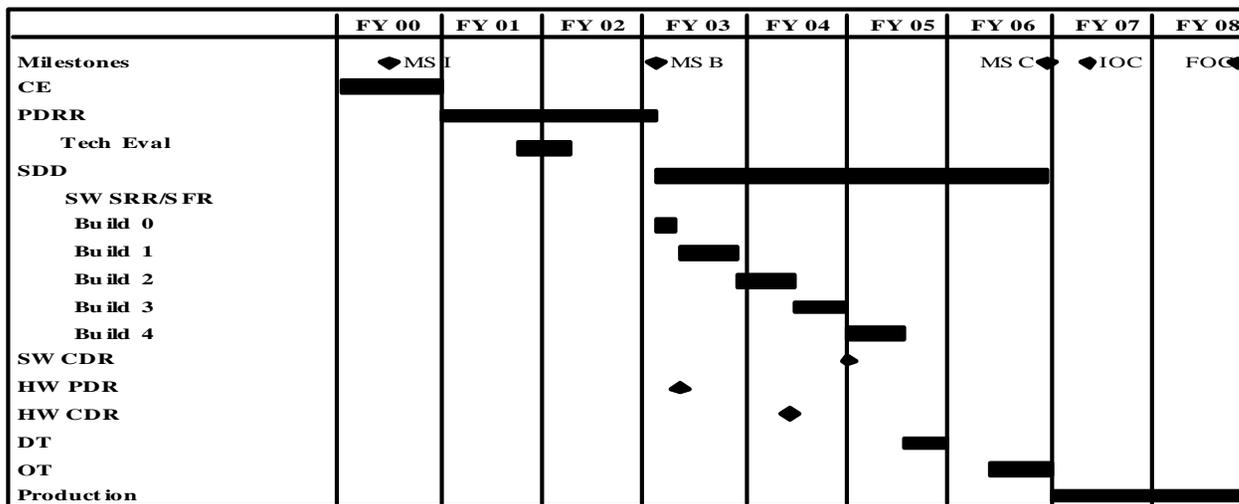
DATE: February 2004

APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Systems Development

PROGRAM ELEMENT  
0206313M Marine Corps Communications Sys

PROJECT NUMBER AND NAME  
C2273 Air Operations C2 Systems

## CAC2S Macro Program Schedule



**Program Funding Summary**

(APPN, BLI #, NOMEN)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Comp</u>	<u>Total Cost</u>
(U) RDT&E,N, C2273	48.072	61.924	64.697	31.125	63.890	11.915	8.623	Continuing	Continuing
(U) PMC, BLI# 468900, CAC2S	0.000	0.000	0.000	3.899	39.139	41.755	41.905	Continuing	Continuing

<b>Exhibit R-4/4a</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA 7 Operational Systems Development</b>	PROGRAM ELEMENT <b>0206313M Marine Corps Communications Sys</b>	PROJECT NUMBER AND NAME <b>C2273 Air Operations C2 Systems</b>

<b>CAC2S SCHEDULE DETAIL</b>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Milestone I (FY01)							
Milestone B	1st Qtr						
PDRR (FY01 - FY12)							
SDD	1st Qtr+++++						
DT			3rd Qtr				
OT				3rd Qtr			
Long Lead Items				3rd Qtr			
Milestone C				4th Qtr			
Production					1st Qtr+++++		
IOC					2nd Qtr		
FOC						4th Qtr	

Exhibit R-4/4a

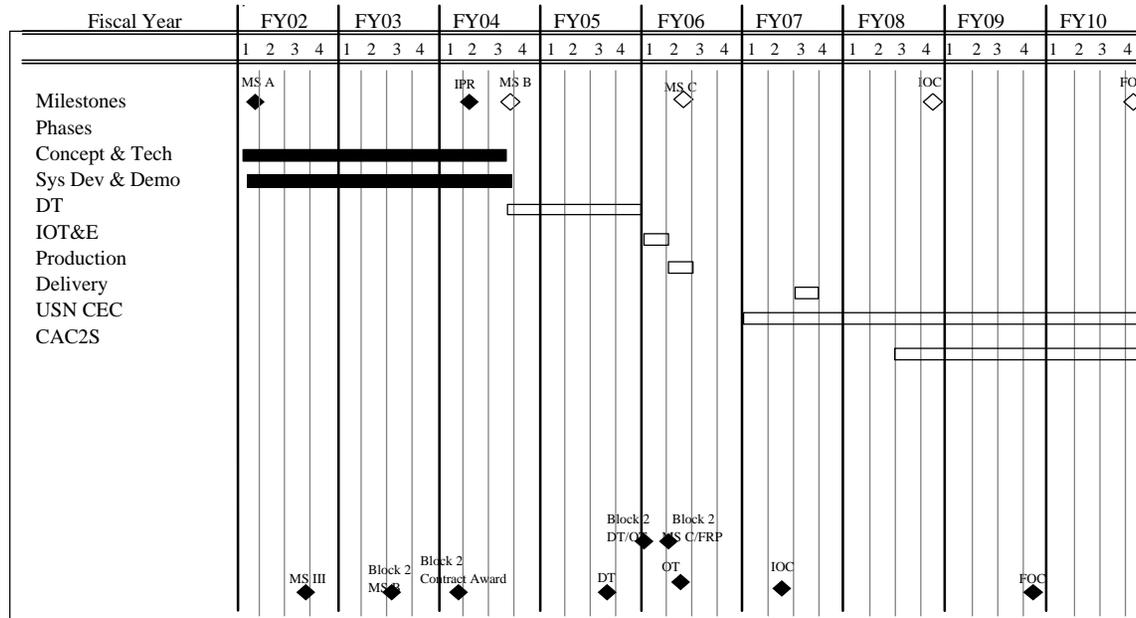
DATE: February 2004

APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Systems Development

PROGRAM ELEMENT  
0206313M Marine Corps Communications Sys

PROJECT NUMBER AND NAME  
C2273 Air Operations C2 Systems

CTN



**Program Funding Summary**

(APPN, BLI #, NOMEN)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Comr	Total Cost
(U) RDT&E,N, C2278	7.727	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.727
(U) RDT&E,N, C2273	0.000	9.481	5.305	6.295	1.339	1.332	0.849	Continuing	Continuing
(U) PMC, BLI# 464000, CTN	0.000	0.000	0.000	22.477	34.840	43.993	68.803	Continuing	Continuing







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<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>					DATE: <b>February 2004</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>		PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Sys</b>			PROJECT NUMBER AND NAME <b>C2274 Intelligence C2 Warfare Systems</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost To Complete	Total Program
Project Cost	<b>8.142</b>	<b>12.965</b>	<b>8.136</b>	<b>5.437</b>	<b>4.527</b>	<b>4.222</b>	<b>4.608</b>	<b>Cont</b>	<b>Cont</b>
RDT&E Articles Qty									

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

- (U) Command and Control (C2) Warfare Project includes the following tactical electronic intercept, direction finding, and electronic attack systems:
1. The Tactical Electronic Reconnaissance Processing and Evaluation System (TERPES) is used to process, sort, analyze, display and correlate electronic surveillance and electronic attack data collected by EA-6B aircraft and maintains the Tactical Electronic Orders of Battle.
  2. The Mobile Electronic Warfare Support System, Product Improvement Program (MEWSS-PIP) will be used to collect and process communication and non-communication signals and provide electronic attack capability from a mobile ground platform.
  3. Team Portable Collection System (TPCS) upgrade is a semi-automated, team transportable signals intelligence system that provides communications intercept, radio direction finding analysis and reporting to the Marine Air Ground Task Force (MAGTF) Commander.
  4. The Radio Reconnaissance Equipment Program (RREP) provides the Radio Battalions, Radio Reconnaissance Platoons (RRP) with mission unique Signals Intelligence/Ground Electronic Warfare (SIGINT/EW) Equipment suites. Continuing with an evolutionary acquisition approach, the third suite RREP-SS-2 will provide the RRP's with the capability to conduct SIGINT/EW operations in support of Marine Air Ground Task Force (MAGTF) Commanders during advance force special operations, and other special purpose missions where the use of conventional Radio Battalion assets are not feasible. RREP-SS-2 is a ruggedized, modular, man packable system specifically designed utilizing emerging NDI/COTS/GOTS technology for RRP operations, particularly those conducted under the most austere conditions. The RREP SS-3 will be fielded in the 4th Qtr FY04. It will have the added capability to intercept advanced wireless targets identified by the NSA to be operated from remoted positions. SS-3 will extend its life cycle to six years and product improvements will focus on new software and DSP technologies which may be incorporated into the existing system. This approach allows the program to utilize the major components for the entire life-cycle while still keeping pace with emerging Threats and technologies.
  5. CESAS (FLAMES) - The Communication Emitter Sensing and Attacking System (CESAS) will be a system of COTS/GOTS designed to support the MAGTF Commander in conducting operations. It will provide the capability to effectively sense/detect and attack, through the use of electromagnetic energy, the enemy's communication systems in support of the Commander's Command and Control Warfare plan. The system will replace for the existing AN/ULQ-19 and will assume the mission of sensing and denying the enemy the use of the electromagnetic spectrum, thereby disrupting his command and control system. Though primarily HMMWV-mounted, CESAS will also be capable of both seaborne and airborne deployment and employment, enhancing the Radio Battalion's ability to support Operational Maneuver from the Sea. The CESAS shall provide the capability to operate within the bandwidth of 20 to 1500 MHz (Threshold)k 2MHz to 2500 MHz (Objective) against enemy emitters that use modern modulation schemes.

**UNCLASSIFIED**

**EXHIBIT R-2a, RDT&E Project Justification**

DATE:

**February 2004**

APPROPRIATION/BUDGET ACTIVITY  
**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME  
**0206313M Marine Corps Communications Sys**

PROJECT NUMBER AND NAME  
**C2274 Intelligence C2 Warfare Systems**

**(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM**

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.248</b>
RDT&E Articles Qty			

**CESAS** - Perform integration efforts of Development items to include Antenna and MCREWS Training equipment.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.321</b>
RDT&E Articles Qty			

**CESAS** - Research and Development Directed Energy and Directional Attack Antennas.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.100</b>
RDT&E Articles Qty			

**CESAS** - Begin Research and Development of training materials and training documentation.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.150</b>
RDT&E Articles Qty			

**CESAS** - Research and Development of Training Equipment; MCREWS modification for USQ-146 real time simulation equipment to provide a "Miles Gear" type application for Electronic Attack equipment and Victim Receiver interface.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.300</b>
RDT&E Articles Qty			

**CESAS** - Program support and documentation Development and Maintenance.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.047</b>
RDT&E Articles Qty			

**CESAS** - Program Management Support.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>1.100</b>	<b>0.404</b>	<b>0.000</b>
RDT&E Articles Qty			

**MEWSS PIP:** Developmental testing and Operational Analysis.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.400</b>	<b>1.000</b>	<b>1.000</b>
RDT&E Articles Qty			

**MEWSS PIP:** System software enhancements and Pre-Planned Product Improvement (P3I).

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APPROPRIATION/BUDGET ACTIVITY  
**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME  
**0206313M Marine Corps Communications Sys**

PROJECT NUMBER AND NAME  
**C2274 Intelligence C2 Warfare Systems**

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>3.144</b>	<b>3.400</b>	<b>0.000</b>
RDT&E Articles Qty			

**MEWSS PIP:** ELINT System enhancements.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.828</b>	<b>4.000</b>	<b>2.210</b>
RDT&E Articles Qty			

**MEWSS PIP:** Operational Readiness enhancements.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.159</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**TPCS Upgrade:** SSCC.SC, Engineering and technical support

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.290</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**TPCS Upgrade:** System Engineering and Technical Assistance (SETA) (CSC).

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.100</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**TPCS Upgrade:** Software upgrades/system enhancements.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.414</b>	<b>0.984</b>	<b>0.917</b>
RDT&E Articles Qty			

**TERPES:** Continue research on COE compliance, research for Tactical Network Protocol (TNP), research of interface software for Integrated Broadcast Receivers (IBRs), and Integrated Broadcast Service (IBS) to allow TERPES to receive joint common message formats, configuration management support; hardware engineering support services concentrating on reductions of size, weight, and power requirements.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.800</b>	<b>1.466</b>	<b>1.308</b>
RDT&E Articles Qty			

**TERPES:** Research for TERPES software applications, hardware and software integration research, investment for R&D equipment and facilities; work to integrate the newer integrated broadcast receivers (IBR)s (Joint Tactical Terminal (JTT) and research on TADIL J). Advanced Communications Suite, Sensitive Compartmented Information (SCI) workstation, and system accreditation.

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APPROPRIATION/BUDGET ACTIVITY  
**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME  
**0206313M Marine Corps Communications Sys**

PROJECT NUMBER AND NAME  
**C2274 Intelligence C2 Warfare Systems**

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.561</b>	<b>1.039</b>	<b>0.753</b>
RDT&E Articles Qty			

**TERPES:** Research TERPES software to provide improvements in the interfaces and interoperability with the EA-6B Improved Capabilities (ICAP) II and III aircraft, (TEPP/TSP application); improve overall system performance (Tactical Data Correlation, etc); continue to research COE 4.X baseline; research interfaces and interoperability requirements and solutions for the EA-6B mission planning and joint mission planning environments and systems.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.212</b>	<b>0.361</b>	<b>0.370</b>
RDT&E Articles Qty			

**TERPES:** Program Management Support.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.134</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**RREP:** Integration GOTS/COTS electronic attack (EA) capability (SS-3).

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.311</b>	<b>0.412</b>
RDT&E Articles Qty			

**RREP:** Research and development of the RREP SS-3 PIP

(U) Total \$	<b><u>8.142</u></b>	<b><u>12.965</u></b>	<b><u>8.136</u></b>
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(U) PROJECT CHANGE SUMMARY:	FY2003	FY2004	FY2005
<b>(U) FY 2004 President's Budget:</b>	<b>7.987</b>	<b>9.727</b>	<b>5.655</b>
(U) Adjustments from the President's Budget:			
(U) Congressional/OSD Program Reductions			
(U) Congressional Rescissions			
(U) Congressional Increases		3.400	
(U) Reprogrammings	0.340		2.528
(U) SBIR/STTR Transfer	-0.185		
(U) Minor Affordability Adjustments		-0.162	-0.047
<b>(U) FY 2005 President's Budget:</b>	<b>8.142</b>	<b>12.965</b>	<b>8.136</b>

CHANGE SUMMARY EXPLANATION:

- (U) Funding: See Above.
- (U) Schedule: Not Applicable.
- (U) Technical: Not Applicable.

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PROJECT NUMBER AND NAME

**RDT&E, N /BA-7 Operational Sys Dev**

**0206313M Marine Corps Communications Sys**

**C2274 Intelligence C2 Warfare Systems**

**(U) C. OTHER PROGRAM FUNDING SUMMARY:A167**

<u>Line Item No. &amp; Name</u>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>To Compl</b>	<b>Total Cost</b>
(U) PMC BLI 463600 Modification Kits MEWSS	25.213	20.633	0.000	1.349	0.511	0.000	0.000	Continuing	Continuing
(U) PMC BLI 474700 Intell Suppt Eq RREP	2.742	0.000	0.000	4.194	0.000	0.000	4.228	0.000	11.164
(U) PMC BLI 474700 Intell Suppt Eq TPCS-MPC	0.000	0.000	6.360	8.038	7.746	5.936	0.299	0.000	28.379
(U) PMC BLI 474900 TPCS UPGRADE	6.781	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.781
(U) PMC BLI 474900 Mod Kits INTEL TERPES	1.163	2.828	0.000	3.022	0.000	3.182	0.000	0.000	10.195
(U) PMC BLI 463600 FLAMES (CESAS)	2.470	0.000	0.984	4.170	4.079	0.475	1.375	0.000	13.553

**(U) Related RDT&E:**

(U) (U) PE 0305885G (Tactical Cryptologic Program)

**(U) D. ACQUISITION STRATEGY TERPES:** The acquisition of components for the TERPES upgrade refreshes will maximize the use of existing equipment, NDI/COTS/GOTS/GFE equipment and software. The integration effort for TERPES hardware and software will be accomplished through the TERPES System Support Activity, Naval Air Warfare Center - Weapons Division, Pt. Mugu, CA. These efforts are directed by the Program Manager for Intelligence Systems, MAGTF C4ISR Product Group, Marine Corps Systems Command. This strategy accomplishes several goals: standardization of equipment and software; use equipment that can be acquired and fielded quickly, reduction of logistics requirements, and reduce cost of software maintenance.

**(U) D. ACQUISITION STRATEGY MEWSS PIP:** The MEWSS PIP initiates Marine Corps Systems Command-administered contracts as follow-on to the Army CECOM Intelligence and Electronic Warfare Common Sensor (IEWCS) contract used for development/fielding of the three MEWSS PIP LRIP vehicles. These contracts are sole source to Lockheed Martin Systems Integration in Owego, New York.

**(U) D. ACQUISITION STRATEGY TPCS:** The ever-increasing sophistication of target threats and information technology necessitates an evolutionary acquisition approach. TPCS will make incremental improvements through maximum use of COTS, GOTS and NDI. The contract is a Contract Cost Plus Fixed Fee.

**(U) D. ACQUISITION STRATEGY RREP:** The RREP will incorporate and integrate cutting edge technologies through the use of Commercial off the Shelf (COTS) components to include Marine Corps Common Hardware components and Government off the Shelf (GOTS) DII COE compliant software. Contract is Cost Plus Fixed Fee (CPFF).

**(U) D. ACQUISITION STRATEGY CESAS:** Due to the technical maturity of the equipment available, coupled with the relative low risk of the program, an Abbreviated Acquisition Program (AAP) was granted. System engineering will be performed by SPAWAR, Charleston, SC. AN/USQ-146 systems will be acquired via a sole source contract between Rockwell Collins and MCSC. Configuration of equipment to meet required operation capabilities will be performed by Rockwell-Collins prior to delivery. Required modification kits will be developed by Rockwell-Collins as part of the AN/USQ-146 purchase, using designs developed by SSCC. Fielding will be conducted using support from Rockwell-Collins, a support contractor and SSCC. Integrated Logistics Support (ILS) planning and life cycle supportability will be implemented by MCSC and MARCORLOGBASES, Albany GA. Contractor Logistics Support will be used for depot support of the system.

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**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME

**0206313M Marine Corps Communications Sys**

PROJECT NUMBER AND NAME

**C2274 Intelligence C2 Warfare Systems**

**(U) E. MAJOR PERFORMERS:**

**MOBILE ELECTRONIC WARFARE SUPPORT SYSTEM, PRODUCT IMPROVEMENT PROGRAM (MEWSS-PIP)**

- FY03 LOCKHEED MARTIN, Owego NY Provide funds for software enhancements and P3I support. Nov 02  
SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR), Charleston, SC. Software enhancements and P3I. Nov 02  
SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR), Charleston, SC. Legacy Upgrades. Jul 03  
MCOTEA, Quantico, VA - Provide funds for operational Assessment, Mar 03.  
IEWTD, Ft Huachuca, AZ - Provide funds for Developmental Testing Support, Jan03  
Penn State Univ, State College, PA - Provide funds for ELINT Enhancements Mar 03
- FY04 LOCKHEED MARTIN, Owego NY Provide funds for software enhancements and P3I support. Nov 03  
Penn State Univ, State College, PA Funds for ELINT enhancements Nov 03  
SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR), Charleston, SC. Legacy MEWSS readiness enhancements. Nov 03
- FY05 LOCKHEED MARTIN, Owego NY Provide funds for software enhancements and P3I support. Nov 04  
SPACE AND NAVAL WARFARE SYSTEMS CENTER (SPAWAR), Charleston, SC. Legacy MEWSS readiness enhancements. Nov 04

**TEAM PORTABLE COLLECTION SYSTEM (TPCS) Upgrade**

- FY03 SPAWAR, Charleston, S.C., Funds for Engineering and Development  
Digital Access Corp, DAC, Woodbridge, VA, Funds for Software Development.  
MTC, Woodbridge, VA , Funds for Logistical Support.

**TACTICAL ELECTRONIC RECONNAISSANCE PROCESSING AND EVALUATION (TERPES)**

- FY03 NAVAL AIR WARFARE CENTER (NAWC), Pt Mugu CA. Provide funds for hardware and software integration research.  
LOCKHEED MARTIN, Denver CO. Provide funds for research on TERPES software to provide improvement in the interfaces and interoperability with the EA-6B and mission planning systems.  
CALIFORNIA MICROWAVE, Woodland Hills CA. Provide funds for Common Operating Environment (COE) compliance, hardware; software configuration management, and software testing.
- FY04 NAVAL AIR WARFARE CENTER (NAWC), Pt Mugu CA. Provide funds for hardware, software and integration research.  
LOCKHEED MARTIN, Denver CO. Provide funds for research on TERPES software applications to provide improvement in the interfaces and interoperability with the EA-6B and mission planning systems.  
CALIFORNIA MICROWAVE, Woodland Hills CA. Provide funds for Common Operating Environment (COE) compliance; research of interface software for Integrated Broadcast Receivers (IBRs).
- FY05 NAVAL AIR WARFARE CENTER (NAWC), Pt Mugu CA. Provide funds for hardware, software and integration research.  
LOCKHEED MARTIN, Denver CO. Provide funds for research on TERPES software applications to provide improvement in the interfaces and interoperability with the EA-6B and mission planning systems.  
CALIFORNIA MICROWAVE, Woodland Hills CA. Provide funds for Common Operating Environment (COE) compliance; research of interface software for Integrated Broadcast Receivers (IBRs).

**RADIO RECONNAISSANCE EQUIPMENT PROGRAM (RREP)**

- FY03 NAVAL SURFACE WARFARE CENTER, Crane IN. Funds for engineering and program management support for Suite-3. Nov 03  
FY04 NAVAL SURFACE WARFARE CENTER, Crane IN. Funds engineering and program management support for Suite-3. Nov 04  
FY05 NAVAL SURFACE WARFARE CENTER, Crane IN. Funds engineering and program management support for Suite-3. Nov 05

Exhibit R-3 Cost Analysis							DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206313M Marine Corps Communication Systems				C2274 Intelligence C2 Warfare Systems					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MEWSS	CPFF	Lockheed Martin	15.617	0.444	11/02	1.000	11/03	1.000	11/04	Continuing	Continuing	
MEWSS	WR	SPAWAR, S.C	0.000	1.100	02/03	4.000		0.000		Continuing	Continuing	
MEWSS	WR	SPAWAR, S.C	0.000	0.828	07/03	0.404	11/03	2.210	11/04	Continuing	Continuing	
MEWSS	RCP	PSU/Albany	0.000	3.100	05/03	3.400	03/04	0.000		Continuing	Continuing	
TERPES	RCP	NGO-CAL Mic	0.961	0.561	10/02	0.984	10/03	0.917	12/04	Continuing	Continuing	
TERPES	RCP	Lockheed Martin	1.075	0.800	10/02	1.178	10/03	1.021	02/04	Continuing	Continuing	
TERPES	WR	NAWC, Pt. Mugu CA	3.255	0.289	10/02	1.039	10/03	0.753	10/04	Continuing	Continuing	
TERPES	RCP	PRB/COMPTEK	0.090	0.125	10/02	0.288	04/04	0.287	04/05	Continuing	Continuing	
RREP	RCP	NSWC, Crane	0.332	0.134	02/03	0.311	02/04	0.412	02/05	Continuing	Continuing	
CESAS	WR	SPAWARSYSCEN						0.248	10/04	Continuing	Continuing	
CESAS	CPFF	Antenna Res, MD						0.321	10/04	Continuing	Continuing	
CESAS	CPFF	Radio Recon Tech						0.100	10/04	Continuing	Continuing	
CESAS	T&M	RAS Eng Campbell,CA						0.150	10/04	Continuing	Continuing	
<b>Subtotal Product Development</b>			<b>21.330</b>	<b>7.381</b>		<b>12.604</b>		<b>7.419</b>		<b>Continuing</b>	<b>Continuing</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
TPCS Upgrade	RCP	DAC, Wdbg		0.100	02/03					Continuing	Continuing	
TPCS Upgrade	RCP	MTC		0.290	10/02					Continuing	Continuing	
TPCS Upgrade	WR	SPAWARSYSCEN	0.049	0.159	12/02					Continuing	Continuing	
TERPES	RCP	NG-IT	0.263	0.177	10/02	0.261	10/03	0.270	10/04	Continuing	Continuing	
TERPES	RCP	DAC, Wdbg	0.752	0.035	10/02	0.100	10/03	0.100	10/04	Continuing	Continuing	
CESAS	WR	NG-IT Stafford, VA						0.300	10/04	Continuing	Continuing	
<b>Subtotal Support</b>			<b>1.064</b>	<b>0.761</b>		<b>0.361</b>		<b>0.670</b>		<b>Continuing</b>	<b>Continuing</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MEWSS	RCP	Army	0.200									
<b>Subtotal T&amp;E</b>			<b>0.200</b>	<b>0.000</b>		<b>0.000</b>		<b>0.000</b>		<b>Continuing</b>	<b>Continuing</b>	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CESAS	WR	MCSC						0.049	10/04	Continuing	Continuing	
<b>Subtotal Management</b>			<b>0.000</b>	<b>0.000</b>		<b>0.000</b>		<b>0.047</b>		<b>Continuing</b>	<b>Continuing</b>	
Remarks:												
<b>Total Cost</b>				<b>8.142</b>		<b>12.965</b>		<b>8.136</b>		<b>Continuing</b>	<b>Continuing</b>	



Exhibit 4/4a Schedule Profile/Detail

DATE:

February 2004

APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Sys Dev

PROGRAM ELEMENT  
0206313M Marine Corps Communication Systems

PROJECT NUMBER AND NAME  
C2274 Intelligence C2 Warfare Systems

MEWSS SCHEDULE DETAIL	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Developmental Testing	4Q	1Q/2Q						
Operational Assessment		2Q/3Q						
MS C			2Q					
Field System MEWSS PIP 1-3			2Q					
Contractor Logistics Support (CLS)			2Q					
IOC MEWSS PIP			1Q					
MEWSS Legacy Block 0 and 1 Production			1Q					
MEWSS Legacy Block 0 and 1 Fielding			4Q					
FOC MEWSS PIP			3Q					
MEWSS Legacy Block 2 and 3 Production			3Q/4Q					
MEWSS Legacy Block 2 and 3 Fielding				1Q	3Q			

Exhibit 4/4a Schedule Profile/Detail

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APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Sys Dev

PROGRAM ELEMENT  
0206313M Marine Corps Communication Systems

PROJECT NUMBER AND NAME  
C2274 Intelligence C2 Warfare Systems

**RREP MILESTONE SCHEDULE**

EVENT	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10
SS-3 MS-B	3Q								
SS-3 MS-C		4Q							
SS-3 IOC/FOC				4Q	1Q				
SS-3 PIP IOC/FOC						1Q			
SS-4 MS B						2Q			
SS-4 MS C							2Q		
SS-4 IOC/FOC									1Q

<u>Program</u> <u>(APPN, BLI #, NOMEN)</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N	0.134	0.311	0.412	0.420	0.421	0.427	0.438	Continuing	Continuing
(U) PMC BLI 474700 Intell Suppt EQ RREP	2.742	0.000	0.000	4.194	0.000	0.000	4.228	0.000	11.164



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EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>February 2004</b>			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME			
<b>RDT&amp;E, N /BA-7 Operational Sys Development</b>	<b>0206313M Marine Corps Communication Systems</b>					<b>C2275 Radio Systems</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	<b>0.565</b>	<b>8.772</b>	<b>8.670</b>	<b>4.865</b>	<b>4.328</b>	<b>4.222</b>	<b>3.550</b>	<b>Cont</b>	<b>Cont</b>
RDT&E Articles Qty									
<p><b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b></p> <p><b>(U) Joint Tactical Radio System - JTRS</b> is a OSD-mandated program a Family of Joint Multi-Channel/Multi-Mode, Software-Defined, Reprogrammable Tactical Radio Systems. Providing high capacity line of sight (LOS) and beyond line of sight (BLOS) plain and secure voice, data, and video while operating in frequency bands from 2 MHz to 2 GHz. Providing network connectivity across the radio frequency (RF) spectrum and providing the means for required tactical digital information exchanges.</p> <p>Block 1: Interim Handheld/Manpack and Data Radios. Includes 3 radio systems: the High Frequency Man-pack Radio (HFMR), the Tactical Handheld Radio (THHR), and software upgrades/maintenance for Enhanced Position Location Reporting System (EPLRS) radios.</p> <p>Block 2: Ground Vehicular/Rotary Wing, scaleable to 6 Channels (US Army – Cluster 1): Expeditionary Maneuver Warfare Air Ground Over the Horizon (EMW A/G OTH) Communications Vehicle (initially replacing systems beyond lifecycle: AN/MRC-138, AN/VRC-83), and C2 platforms that require multiple channels in multiple bands (LAV-C2 (Light Armored Vehicle Command and Control Variant, Unit Operations Center (UOC), and EFV (Expeditionary Fighting Vehicle) formerly AAV.</p> <p>Block 3: Handheld/Man-pack, 1 or 2 Channels (USSOCOM – Cluster 2): Multipurpose Handheld and Manpacks (initially replacing systems beyond lifecycle: AN/PRC-68, PRC-104, PRC-113). These radios should be available in FY06-FY07.</p> <p>Tactical Elevated Antenna Mast System (TEAMS) is a single HMMWV mounted 100' telescoping antenna mast replacing the two AN/MRC- 142 50' antennas. TEAMS provides a safer more efficient mast to allow up to twice the current height capability to overcome obstructions caused by over head canopy and obstructing ridges which eliminates the need to set up additional relay sites. TEAMS will be employed with AN/MRC-2 then JTRS when the AN/MRC-142 is replaced by JTRS.</p> <p><b>(U) Tactical Satellite Comm Terminal (TSCT)-Lightweight Multiband Satellite Terminal (LMST)-</b> An Air Force program with PM Milsatcom (Army) managing contract with Harris Corp. The LMST is a tri-band SATCOM (Satellite Communications) terminal mounted in transit cases that will augment the current GMF(Ground Mobile Force) SATCOM and at the same time, provide a commercial satellite capability. SHF Replacement (Wideband SHF) - This is a DoD (Army lead) Quad-band SHF satellite communications terminal that is intended to replace the current GMF satellite communications terminals. It will be a quad-band, HMMWV mounted terminal capable of taking full advantage of the Wideband Gapfiller satellite constellation. Its mission is to support all USMC satellite communications requirements including MAGTF commanders, First in Command and Control System (FICCS), and MEU deployments. It will provide the USMC with DoD and Allied interoperability.</p> <p><b>(U) MILSTAR Advanced Satellite Terminal (SECURE MOBILE ANTI-JAM RELIABLE TACTICAL TERMINAL (SMART-T))</b> - This terminal operates with MILSTAR compatible communications payloads and transmits an extremely high frequency (EHF) uplink signal and receives a super high frequency (SHF) downlink signal to provide the MAGTF commander with robust, low probability of intercept, jam resistant communications.</p> <p><b>(U) Legacy Communications/Electronics</b> Modifications and Sustainment encompass post production sustainment of fielded tactical communication and networking systems and service life extension programs (SLEP) of aging communications equipment reaching the end of their lifecycle. The post production sustainment provides necessary engineering and logistic support to maintain the existing operational capability above threshold operational readiness. The support provides equipment specialists, configuration management, supply support coordination and control, depot maintenance control and warranty administration. There are three SLEP/supportability upgrades required for this POM cycle. These are the AN/TRC-170 Tropospheric Scatter Microwave Radio Terminal, the Unit Level Circuit Switch (ULCS) and the AN/PSC-5 "Shadowfire" modification. The AN/TRC-170 provides secure digital trunking between major nodes of the TRI-TAC communications network with a range of over 100 miles and will reach end of service life in FY05. The ULCS (TTC-42, SB-3865 and SB-3614) require sustainment and modifications to continue the operating forces capability until Transition Switch Module (TSM) is fielded. The AN/PSC-5 Mod allows for the fielded AN/PSC-5 to be supported past FY04.</p> <p><b>(U) Radio Battalion Mods</b> - DERF funding \$2M. Funds are for Test and Evaluation of the Testbed-Sigint Adaptable Mobile Shelter to include Signal Simulators and Fuel Cells.</p>									

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EXHIBIT R-2a, RDT&E Project Justification		DATE:	
APPROPRIATION/BUDGET ACTIVITY		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Development		C2275 Radio Systems	
PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
0206313M Marine Corps Communication Systems		C2275 Radio Systems	
<b>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.237</b>	<b>1.100</b>	<b>1.100</b>
RDT&E Articles Qty			
<b>JTRS:</b> Migration/Integration Studies and Analysis. Manpack/Handheld JTRS.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.328</b>	<b>0.598</b>	<b>0.614</b>
RDT&E Articles Qty			
<b>JTRS:</b> Program Support and Management.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>3.472</b>	<b>4.555</b>
RDT&E Articles Qty			
<b>JTRS:</b> Gnd Vehicular Cluster 1 EMD Radio Manufacturing.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.725</b>	<b>1.313</b>
RDT&E Articles Qty			
<b>JTRS:</b> Gnd Vehicular (Cluster 1) Early Operational Assessment (EOA), Developmental and Operational Testing (DT/OT).			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.752</b>	<b>0.844</b>
RDT&E Articles Qty			
<b>JTRS:</b> Technical and Engineering Support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.325</b>	<b>0.244</b>
RDT&E Articles Qty			
<b>JTRS:</b> Contract Advisory and Assistance Services.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.550</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>TSCT (LMST):</b> Integration and update support documentation.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.100</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>TSCT (LMST):</b> Contract support costs.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.150</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>TSCT (LMST):</b> MCTSSA interoperability/DISA on-orbit tests.			
<b>(U) Total \$</b>	<b><u>0.565</u></b>	<b><u>8.772</u></b>	<b><u>8.670</u></b>

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EXHIBIT R-2a, RDT&E Project Justification				DATE: <b>February 2004</b>						
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N /BA-7 Operational Sys Development</b>	<b>0206313M Marine Corps Communication Systems</b>			<b>C2275 Radio Systems</b>						
<b>(U) PROJECT CHANGE SUMMARY:</b>										
	<b>FY2003</b>	<b>FY 2004</b>	<b>FY 2005</b>							
<b>(U) FY 2004 President's Budget:</b>	<b>0.584</b>	<b>8.881</b>	<b>8.698</b>							
(U) Adjustments from the NAVCOMPT Budget:										
(U) Congressional/OSD Program Reductions										
(U) Congressional Rescissions										
(U) Congressional Increases										
(U) Reprogrammings	0.010									
(U) SBIR/STTR Transfer	-0.015									
(U) Minor Affordability Adjustment	-0.014	-0.109	-0.028							
<b>(U) FY 2005 President's Budget:</b>	<b>0.565</b>	<b>8.772</b>	<b>8.670</b>							
CHANGE SUMMARY EXPLANATION:										
(U) Funding: See Above.										
(U) Schedule: Not Applicable.										
(U) Technical: Not Applicable.										
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b>										
<u>Line Item No. &amp; Name</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>	
(U) PMC, BLI# 464300 Jt Tactical Radio Sys	0.000	13.817	26.009	32.418	97.755	80.695	73.371	Continuing	Continuing	
(U) PMC BLI# 463300 Radio Systems (LMST)	4.598	8.400	5.223	0.289	0.089	0.000	0.000	0.000	18.599	
(U) PMC BLI# 463300 LEGACY RADIO SYS	0.000	0.000	3.756	7.182	10.205	9.253	6.265	Continuing	Continuing	
<b>(U) Related RDT&amp;E: Not Applicable</b>										
<b>(U) D. ACQUISITION STRATEGY:</b>										
<b>(U) Tactical Satellite Comm Terminal - LMST-</b> The acquisition strategy for the LMST is based on current developmental efforts of both the Army and Air Force to develop full duplex Ka-band satellite capabilities in support of the Wideband Gapfiller satellites. The LMST integration program leverages off the current efforts and integrates the full duplex Ka-band capabilities into existing terminals.										
<b>(U) Milstar (SMART-T) -</b> The acquisition strategy for the SMART-T is aligned with the lead service's strategy. The Advanced Extremely High Frequency (AEHF) upgrade will increase throughput and provide interoperability between services.										

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EXHIBIT R-2a, RDT&E Project Justification		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Sys Development</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C2275 Radio Systems</b>
<p><b>(U) JTRS - JTRS</b> is the next generation radio systems to provide required transformational capabilities while leveraging modern technologies to resolve interoperability and lifecycle cost issues. The procurement of JTRS will be blocked by capabilities available at the time of the requirement. Block 1 provides required Handheld/Manpack lifecycle replacements for aging dismounted systems and freeing Receiver-Transmitters (RT) for spare support of ground vehicular systems until Block 2, Ground Vehicular (Cluster 1 JTRS) radio systems can be procured. Also in Block 1, Post Deployment Software Support (PDSS) of Enhanced Position Location Reporting System (EPLRS) will maintain its compatibility with JTRS and reduce its overall lifecycle cost. With JTRS Block 2 and 3, the functional capabilities of today's radios are provided via software. By developing a standardized radio architecture, the same software running in one radio system can be used in radios developed by separate manufacturers, greatly reducing interoperability challenges that have resulted from separate developments. The U.S. Army is beginning procurement of Ground Vehicular radio systems built to the JTRS architecture to provide improved mobile communications support to computer-based command and control systems. These radios will also support Marine Corps requirements for high-capacity, dynamic, mobile, networked communications as the Marine Corps continues to automate its processes. Integration of these radios into C2 platforms, and begin procurement of Ground Vehicular JTRS to replace aging HF Over the Horizon (OTH) (AN/MRC-138) and UHF Air/Ground (AN/VRC-83) radio systems. The integration of JTRS into the EFV will increase its C4I capability and eliminate the cost of retrofitting the EFV for JTRS Life Cycle Cost Reduction. JTRS will reduce development costs for enhancements to future radio system implementations, reduce maintenance support costs by reducing the number of types of radio systems in the inventory, and reduce operating costs through the employment of multi-function radio systems.</p> <p><b>(U) E. MAJOR PERFORMERS:</b></p> <p>FY04 TSCT (LMST) HARRIS COMM SYS, MELBOURNE, FL K-BAND INTERGRATION , OCT03.</p> <p>FY03 JTRS: MITER PROGRAM SUPPORT, OCT 02.</p> <p>FY04 JTRS: BOEING, ANAHEIM, CA,MAJOR H/W SUB, HARRIS, ROCHESTER, NY,BAE, WAYNE NJ. MAJ S/W SUB TRW SEATTLE, WA, OCT 04.</p> <p>FY05 JTRS: BOEING, ANAHEIM, CA ,MAJOR H/W SUB, HARRIS, ROCHESTER, NY ,BAE, WAYNE NJ. MAJ S/W SUB TRW SEATTLE, WA, OCT</p> <p>--</p>		

Exhibit R-3 Cost Analysis								DATE: <b>February 2004</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT					PROJECT NUMBER AND NAME				
<b>RDT&amp;E, N /BA 7 Operational Sys Dev</b>			<b>0206313M Marine Corps Communication Systems</b>					<b>C2275 Radio Systems</b>				
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
LMST Ka-band Integration	FFP	Harris Corp, Florida				0.550	10/03			Continuing	Continuing	
JTRS EMD Radio Manufacturing	CPAF	TBD	0.000	0.000		3.768	06/02	4.811	10/04	Continuing	Continuing	
<b>Subtotal Product Development</b>			<b>0.000</b>	<b>0.000</b>		<b>4.318</b>		<b>4.811</b>		<b>Continuing</b>	<b>Continuing</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
LMST Program travel	Allot	MARCORSYSCOM				0.025	10/03			0.000	0.025	
LMST Technical support	FFP	NGIT, Stafford, VA				0.075	10/03			0.000	0.075	
JTRS TRAVEL	Allot	MARCORSYSCOM		0.020	12/02	0.020	10/03	0.020	10/04		0.060	
JTRS Integration/Migration	FFP	NGIT, Stafford, VA		0.237	10/02	1.105	12/03	1.100	10/04	Continuing	Continuing	
JTRS Tech & Eng Support	FFP	NORTH GRUMMAN				0.752	10/03	0.844	10/04	Continuing	Continuing	
<b>Subtotal Support</b>			<b>0.000</b>	<b>0.257</b>		<b>1.977</b>		<b>1.964</b>		<b>Continuing</b>	<b>Continuing</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
LMST Integration tests	WR	MCTSSA				0.080	07/03			0.000	0.080	0.080
JTRS Gnd Veh EOA/DT/OT	WR	MCOTEA				0.100	12/03	0.100	10/04	Continuing	Continuing	
JTRS Gnd Veh EOA/DT/OT	MIPR	PM TRCS, CECOM				1.420	12/03	1.013	10/04	Continuing	Continuing	5.750
LMST DISA on-orbit tests	MIPR	DISA				0.070	05/03				0.070	
<b>Subtotal T&amp;E</b>			<b>0.000</b>	<b>0.000</b>		<b>1.670</b>		<b>1.113</b>		<b>0.000</b>	<b>2.783</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JTRS Program Support	FFP	NGIT, Stafford, VA		0.308	10/02	0.492	12/03	0.548	10/04	Continuing	Continuing	
JTRS Contract Adv & Assist	FFP	TITAN VA				0.315	12/03	0.234	10/04	Continuing	Continuing	
<b>Subtotal Management</b>			<b>0.000</b>	<b>0.308</b>		<b>0.807</b>		<b>0.782</b>		<b>0.000</b>	<b>1.897</b>	
Remarks:												
<b>Total Cost</b>				<b>0.565</b>		<b>8.772</b>		<b>8.670</b>		<b>Continuing</b>	<b>Continuing</b>	

APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Sys Dev

PROGRAM ELEMENT  
0206313M Marine Corps Communication Systems

PROJECT NUMBER AND NAME  
C2275 Radio Systems

**JOINT TACTICAL RADIO SYSTEM (JTRS)**

FISCAL YEARS	FY02	FY03	FY04	FY05	FY06	FY07	FY08
<u>BLOCK 1 (Interim)</u>							
MANPACK HFMR			207	602	32		
MANPACK MBMMR			26	58	104		
HANDHELD THHR			620	1283	597		
TEAMS							
Milestone			▲ MS 'C'	67	22	15	112
<u>BLOCK 2 (JTRS Cluster 1 Vehicular)</u>			<u>EMD</u>		<u>LRIP</u>	<u>FRP</u>	<u>FRP</u>
Milestones	▲ MS 'B'		10		83	340	290
Contract Award	▲				MS 'C'▲		
Operation Capability							▲ IOC
<u>BLOCK 3 (JTRS Cluster 2 Manpack/Handheld)</u>					<u>EMD</u>	<u>LRIP</u>	<u>LRIP</u>
Milestones					▲ MS 'B'		▲ MS 'C'
Contract Award					▲		
Operation Capability							

**Program Funding Summary**

(APPN, BLI #, NOMEN)

(U) RDT&E,N  
(U) PMC BLI# 464300 JTRS

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) RDT&E,N	0.565	7.972	8.670	4.104	3.741	1.571	1.634	Continuing	Continuing
(U) PMC BLI# 464300 JTRS	0.000	13.817	26.009	32.418	97.755	80.695	73.371	Continuing	Continuing



APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Sys Dev

PROGRAM ELEMENT  
0206313M Marine Corps Communication Systems

PROJECT NUMBER AND NAME  
C2275 Radio Systems

TACTICAL SATELLITE COMMUNICATION TERMINAL (LMST)

Fiscal Year	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	Total
Milestone III (procurement)	◆										
Contract ECP Award	◆										
Terminal Deliveries/Fielding			■								
IOC			◆								
FOC				◆							
Ka-band development			■								
Integration Fielding				■							
IOC				◆							
FOC							◆				

**Program Funding Summary**

(APPN, BLI #, NOMEN)

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY2008	FY2009	To Compl	Total Cost
(U) RDT&E,N	0.000	0.800	0.000	0.000	0.000	0.555	0.743	0.000	2.098
(U) PMC BLI# 463300 Radio Systems (LMST)	4.598	8.400	5.223	0.289	0.089	0.000	0.000	0.000	18.599



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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2004

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME				PROJECT NUMBER AND NAME				
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Sys				C2276 Communications Switching & Control Systems				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost To Complete	Total Program
Project Cost	2.773	6.449	3.803	4.663	3.913	4.039	3.430	Continuing	Continuing
RDT&E Articles Qty									

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

(U) **The Joint Network Management System (JNMS)** is a Combatant Commander, Joint Task Force (CJTF) communications planning and management system. It provides communication planners with the capabilities to conduct high level planning; detailed planning and engineering; monitoring; control and reconfiguration; spectrum planning and management; and security of systems and networks supporting joint operations. The Combatant Commander, CJTF, Joint Communications Control Center (JCCC), and Service component headquarters, System control (SYSCON), will use JNMS to create, modify and manage standardized and automated communications plan (e.g., Annex K). JNMS architecture includes the Marine Corps System Planning Engineering Evaluation Device (SPEED) software.

(U) **The Transition Switch Module (TSM)** will provide a flexible Unit Level Switch that bridges legacy Tri-Tac switches with current commercial technology, providing maneuver elements with improved voice/data switching, data transport and bandwidth management capabilities. This program will maintain USMC joint interoperability as all Services transition to COTS switching technologies.

(U) **The Tactical Data Network (TDN)** augments the existing Marine Air Ground Task Force (MAGTF) communications infrastructure to provide the commander an integrated data network, forming the communications backbone for Tactical Data Systems (TDS) and the Defense Messaging System (DMS). TDN consists of Gateways (AN/TSQ-222) and Data Distribution Systems (AN/TSQ-228), interconnected with one another and their subscribers via a combination of common user long-haul transmission systems, local area networks (LAN), and switched telephone systems. The TDN PIP provides a smaller and more mobile variant DDS for the Battalion, Secure Wireless LAN capability for enhanced mobility, integrates security interdiction products into the Gateway; and provides critical refresh of non-MCHS network components such as routers, switches, converters, and tactical peripherals.

(U) **The First In Command and Control System (FICCS)** is an integrated, processor-controlled communications and management system, housed in a S-788/G Lightweight Multipurpose Shelter (LMS), providing secure and non-secure voice and data communications, switching functions, network routing and management, and global broadcast functions. The S-788/G LMS is mounted on a Heavy-variant High Mobility Multipurpose Wheeled Vehicle (H-HMMWV) and can be connected to a quick-erect general purpose tent.

**(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:**

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.731	0.000	0.000
RDT&E Articles Qty			

**JNMS:** Development, testing, and IOT&E of JNMS hardware suites and upgrade SPEED for DII COE LVL 6 compliance.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	0.000	1.382	1.022
RDT&E Articles Qty			

**JNMS:** JNMS MS III/C. Develop USMC unique modules for JNMS applicationa, and SPEED enhancements for JNMS, IOW, and EPLRS.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	2.042	0.000	0.000
RDT&E Articles Qty			

**TSM:** Development and testing of Engineering Development Models (EDM).

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2004

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>	<b>C2276 Communications Switching &amp; Control Systems</b>		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.971</b>	<b>1.648</b>	
RDT&E Articles Qty				
<b>TSM:</b> Development of cellular telephone and Voice over IP (VoIP) capability for integration into TSM EDMs and test for interoperability/operational suitability.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>4.096</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>FICCS:</b> Develop and test the integration of Gigabite Ethernet, and Wireless Telephone technologies into the FICCS platform.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>1.133</b>	
RDT&E Articles Qty				
<b>FICCS:</b> Pursue miniaturization of hardware solutions, collaborate with MCTSSA SIE and conduct Interoperability Testing at JITC.				
<b>(U) Total \$</b>	<b><u>2.773</u></b>	<b><u>6.449</u></b>	<b><u>3.803</u></b>	
<b>(U) PROJECT CHANGE SUMMARY:</b>				
	<b>FY2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	
<b>(U) FY 2004 President's Budget:</b>	<b>4.513</b>	<b>6.381</b>	<b>3.815</b>	
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	-1.627	0.152		
(U) SBIR/STTR Transfer	-0.116			
(U) Minor Affordability Adjustment	0.003	-0.084	-0.012	
<b>(U) FY 2005 President's Budget:</b>	<b>2.773</b>	<b>6.449</b>	<b>3.803</b>	
CHANGE SUMMARY EXPLANATION:				
(U) Funding: See Above.				
(U) Schedule: Not Applicable.				
(U) Technical: Not Applicable.				

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EXHIBIT R-2a, RDT&E Project Justification

DATE:

February 2004

<b>APPROPRIATION/BUDGET ACTIVITY</b>	<b>PROGRAM ELEMENT NUMBER AND NAME</b>	<b>PROJECT NUMBER AND NAME</b>
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>	<b>C2276 Communications Switching &amp; Control Systems</b>

**(U) C. OTHER PROGRAM FUNDING SUMMARY:**

<u>Line Item No. &amp; Name</u>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
<b>(U)PMC BLI 463400 Communications Switching and Control Systems</b>									
JNMS	0.000	5.790	5.274	1.293	1.050	0.650	0.000	0.000	14.057
FICCS	0.000	9.527	11.288	17.102	1.884	0.768	0.853	0.000	41.422
JECCS	19.970	0.000	0.000	0.000	0.000	0.000	0.000	0.000	19.970
<b>(U)PMC BLI 468800 Transition Switch Module</b>	0.000	22.902	9.245	47.005	52.913	19.809	2.958	Continuing	Continuing

**(U) Related RDT&E: Not Applicable.**

**(U) D. ACQUISITION STRATEGY JNMS:** The JNMS acquisition strategy awards a Cost Plus Fixed Fee (CPFF) contract for the development of the JNMS software, Firm Fixed Price (FFP) options for JNMS software and hardware suites, and a future Time and Materials (T&M) option for production and fielding support. The contracts were awarded using a best value, full and open competition source selection process that stresses the use of Commercial Off The Shelf (COTS). If COTS is not available, then Government-off-the-Shelf (GOTS) products will be the next strategy emphasized. A performance specification is used as the technical basis for the JNMS.

**(U) D. ACQUISITION STRATEGY TSM:** The TSM acquisition strategy calls for use of FY03 R&D to develop and demonstrate a system of sufficient maturity for production (Milestone C). There will be a single contract award for Low Rate Initial Production (LRIP), testing and full-rate production after successful completion of test. FY04 and FY05 R&D will be used to develop potential cellular telephone and Voice over IP (VoIP) technology for insertion into the TSM Engineering Development Models (EDMs). They will then be tested prior to incorporating them into the TSM production systems.

**(U) D. ACQUISITION STRATEGY FICCS:** FICCS will use the evolutionary acquisition strategy with the Block I variant consisting of the initial three JECCS systems. These systems are to be fielded during FY-03, with over \$1M of proposed Office of Naval Research Science and Technology (ONR S&T) and \$80K Extended Lateral Battlespace Advanced Concept Technology Demonstration (ELB ACTD) (Wireless) efforts, FICCS Block II will consist of six (6) JECCS production units and nine (9) Operational Shelters, which will include upgrades to emerging hardware/software. Exploring the Block II/III R&D effort, FICCS Block III will achieve the current AAO of fourteen (14) FICCS systems with the production of five (5) JECCS units and five (5) Operational Shelters.

**(U) E. Major Performers:**

FY03 - (JNMS) NGIT, Winterpark, FL. SPEED enhancements; CECOM Monmouth, NJ, hardware test suite

FY04 - (JNMS) NGIT, Winterpark, FL. SPEED enhancements; CECOM, Monmouth, NJ. USMC JNMS adapters, MCOTEA, Quantico, VA, and FMF IOT&E support, JAN 04

FY05 - (JNMS) NGIT, Winterpark, FL. SPEED enhancements; CECOM, Monmouth, NJ. USMC JNMS adapters, JAN 05

FY03/04 - (TSM) TBD, Prime Contractor, TSM prototype design/build/test, OCT 02

FY 04/05 - (TSM) TBD, Prime Contractor, Integration and test of VoIP and Wireless technology

FY04 - (FICCS) Darlington, Inc., Wando, SC. Integration and test of Gigabit Ethernet and Wireless Telephone technology, OCT 04

FY05 - (FICCS) Darlington, Inc., Wando, SC. Hardware miniaturization and colaboration/testing with MCTSSA SIE & JITC, OCT 05

Exhibit R-3 Cost Analysis						DATE: <b>February 2004</b>						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDT&amp;E, N /BA 7 Operational Sys Dev</b>			<b>0206313M Marine Corps Communications Sys</b>			<b>C2276 Communications Switching &amp; Control Systems</b>						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JNMS Development	CPFF	CECOM, Monmouth, NJ	0.000	0.114	01/03	0.199	01/04	0.154	01/05	Cont.	Cont.	
JNMS SPEED	FFP	NGIT Winterpark, FL	0.500	0.222	01/03	0.602	01/04	0.458	01/05	Cont.	Cont.	
FICCS	CPFF	GSA	0.000	0.000		3.396	01/04	0.633	10/04	Cont.	Cont.	
TSM	FFP	MCSC, Quantico, Va	0.000	0.884	07/03	0.543	10/03	0.688	10/04	Cont.	Cont.	
<b>Subtotal Product Dev</b>			<b>0.500</b>	<b>1.220</b>		<b>4.740</b>		<b>1.933</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JNMS PO Support	WR	MCSC, Quantico, VA/MCTSSA	0.064	0.100	01/03	0.081	01/04	0.090	01/05	Cont.	Cont.	
JNMS Support Contractor	FFP	NGIT, Aquia, VA	0.125	0.230	01/03	0.300	01/04	0.320	01/05	Cont.	Cont.	
FICCS	CPFF	Support Contractor	0.000	0.000		0.500	10/03	0.300	10/04	Cont.	Cont.	
TSM	FFP	NGIT, Aquia, VA	0.000	0.716	10/02	0.304	10/03	0.285	10/04	Cont.	Cont.	
<b>Subtotal Support</b>			<b>0.189</b>	<b>1.046</b>		<b>1.185</b>		<b>0.995</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JNMS	WR	MCOTEA/FMF	0.000	0.065	01/03	0.200	12/03	0.000		Cont.	Cont.	
FICCS	WR	MCOTEA	0.000	0.000		0.200	10/03	0.200	10/04	Cont.	Cont.	
TSM	FFP	CECOM, FT Monmouth, NJ	0.000	0.243	10/02	0.000	11/03	0.450	12/04	Cont.	Cont.	
TSM	WR	MCOTEA	0.000	0.199	12/02	0.124	10/03	0.225	10/04	Cont.	Cont.	
<b>Subtotal T&amp;E</b>			<b>0.000</b>	<b>0.507</b>		<b>0.524</b>		<b>0.875</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
<b>Subtotal Management</b>			<b>0.000</b>	<b>0.000</b>				<b>0.000</b>		<b>0.000</b>	<b>0.000</b>	
Remarks:												
<b>Total Cost</b>			<b>0.689</b>	<b>2.773</b>		<b>6.449</b>		<b>3.803</b>		<b>Cont.</b>	<b>Cont.</b>	

**CLASSIFICATION:**

Exhibit R-4/4a Schedule Profile/Detail

DATE:

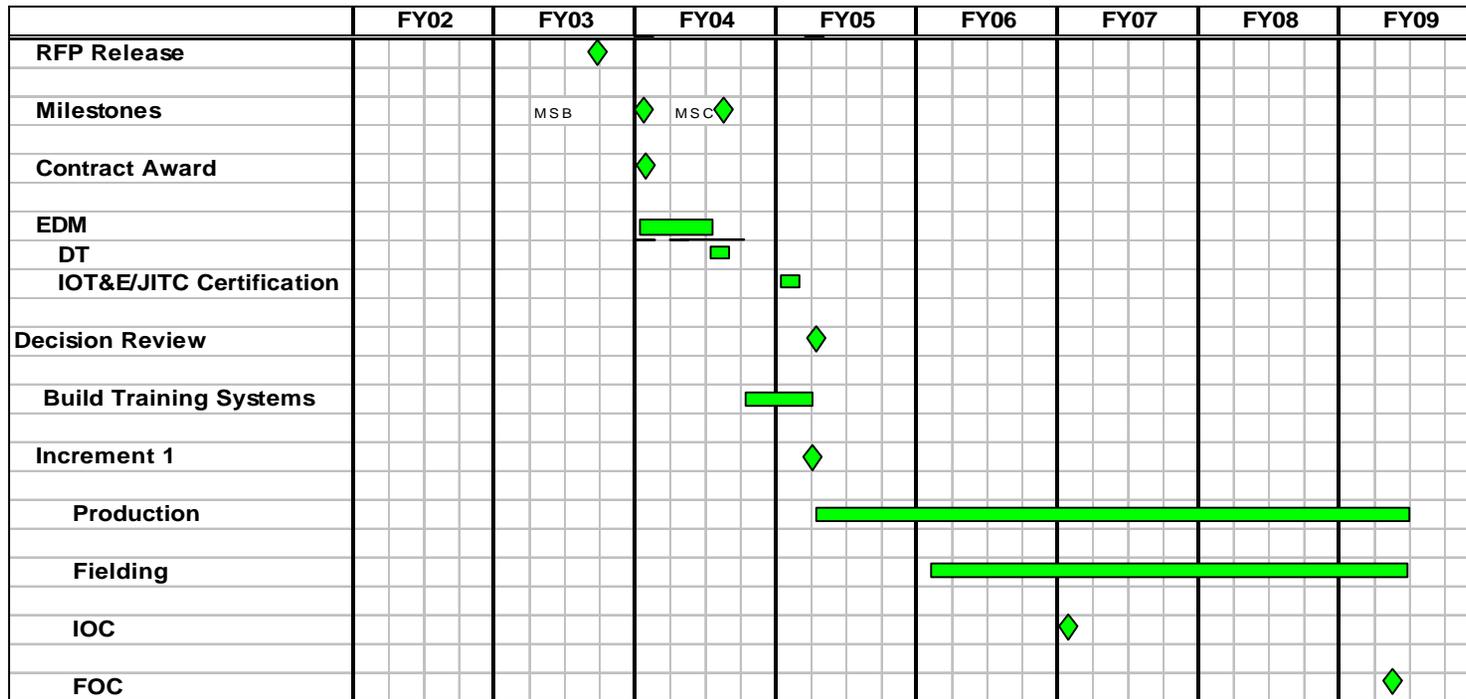
February 2004

APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Sys Dev

PROGRAM ELEMENT  
0206313M Marine Corps Communications Sys

PROJECT NUMBER AND NAME  
C2276 Communications Switching & Control Systems

**TRANSITION SWITCH MODULE**



**Program Funding Summary**

(APPN, BLI #, NOMEN)

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) RDT&E,N	2.042	0.971	1.648	1.671	1.140	0.906	0.921	0.000	9.299
(U) PMC BLI# 468800 Transition Switch Module (TSM)	0.000	22.902	9.245	47.005	52.913	19.809	2.958	Continuing	Continuing



**CLASSIFICATION:**

Exhibit R-4/4a Schedule Profile/Detail	DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA 7 Operational Sys Dev</b>	PROGRAM ELEMENT <b>0206313M Marine Corps Communications Sys</b>
PROJECT NUMBER AND NAME <b>C2276 Communications Switching &amp; Control Systems</b>	

Task Name	JNMS																																	
	00				01				02				03				04				05				06				07				0	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
JROC Approval		■																																
Milestone I/II			■																															
RFP Release			■																															
JNMS Develop Contract Awd							■																											
FQT Threshold															▲																			
Operational Test (IOT&E)															▲▲▲																			
SPEED (JNMS) Modern Contr Awd															▲																			
Milestone C Approval																																		
Marine Corps Fielding																																		

**Program Funding Summary**

(APPN, BLI #, NOMEN)

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N	0.731	1.382	1.022	0.843	0.821	0.649	0.030	Continuing	Continuing
(U) PMC BLI# 463400 CommSwitch& Ctl Sys (JNMS)	0.000	5.790	5.274	1.293	1.050	0.650	0	0.000	14.057





**CLASSIFICATION:**

Exhibit R-4/4a Schedule Profile/Detail DATE: **February 2004**

APPROPRIATION/BUDGET ACTIVITY | PROGRAM ELEMENT | PROJECT NUMBER AND NAME  
**RDT&E, N /BA 7 Operational Sys Dev** | **0206313M Marine Corps Communications Sys** | **C2276 Communications Switching & Control Systems**

<b>FICCS SCHEDULE DETAIL</b>	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
System Design Review							
Test Readiness Review							
Environmental/Transportation Testing	1Q						
Field Evaluation	2Q						
Fielding Decision	3Q						
Initial Operational Capability	3Q						
Technology Refresh (Block II) / Development and Test		1Q-4Q					
Full Rate Production Decision - Block II		1Q					
Full Rate Production of Block II		1Q-----	-----	-----3Q			
Fielding Decision - Block II				3Q			
FOC				3Q			
Block III R&D			1Q 05-----	-----	4Q 07		
Block III Production (Retrofit)					1Q-----	-----	-----3Q

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EXHIBIT R-2a, RDT&E Project Justification					DATE: <b>February 2004</b>				
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Systems</b>				PROJECT NUMBER AND NAME <b>C2277 Systems Engineering &amp; Integration</b>				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	<b>8.918</b>	<b>8.762</b>	<b>7.960</b>	<b>9.567</b>	<b>8.744</b>	<b>9.030</b>	<b>9.204</b>	<b>Cont</b>	<b>Cont</b>
RDT&E Articles Qty									

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

(U) This project provides funds for engineering, test, and evaluation activity, which ensures that the systems being developed within the Program Element (PE) employ consistent standards for interoperability and, to the maximum extent feasible, use hardware, and software which is uniform across programs.

1. The Marine Air-Ground Task Force Command, Control, Communications, Computers, and Intelligence Systems Engineering and Integration, Coordination. (MAGTF C4I SEI&C) subproject is a non-acquisition effort which provides centralized planning and execution of MAGTF C4I Systems. It develops, certifies and manages the configuration of the MAGTF C4I Systems/Technical Architecture and its implementation. It is also used to develop and test common hardware and software for use in MAGTF C4I Systems; MAGTF C4I SE&I also funds USMC participation in joint planning, technical standards development and joint exercise participation
2. Global Broadcast Service (GBS) Terminal – The GBS is a satellite system composed of a space segment, a transmit suite and a Receive Suite. It provides near worldwide high data rate dissemination of large information products such as classified and unclassified intelligence and video, theater message traffic, joint and service-unique news, weather and Morale Welfare Recreation (MWR) programming to deployed or garrison forces via small user platforms.
3. MAGTF C4I SEI&C Joint Distributed Engineering Plant (JDEP) is a DoD mandated program to evaluate the interoperability of the Family of Systems (FoS) C4ISR configurations that support joint forces, evaluate the interoperability of new acquisition systems, and provide an environment for engineering analysis to correct systems deficiencies and develop new capabilities.
4. Joint Warrior Interoperability Demos (JWID) is a JCS-mandated program to demonstrate new C4I interoperability concepts for the warrior. JWID offers the opportunity for demonstrations of evolving technologies in interoperability, information dissemination, fusing and digital communications.
5. The Joint Interoperability of Tactical Command and Control Systems (JINTACCS) is a Joint Chiefs-of-Staff (JCS)-mandated program for joint development, implementation, and testing of data links under the direction of the Joint Interoperability Engineering Organization (JIEO).
6. Common Computer Resources (CCR) Marine Common Hardware Suite (MCHS) mission – Central and standardized management and acquisition of all Tactical common computer hardware and infrastructure adopting the Joint Defense Information Infrastructure (DII) Common Operating Environment (COE) with consolidated Integrated Logistics Support. Ensure the environment remains in synchronization with computer hardware technology hardware improvements. The mission supports the Commandant’s Planning Guidance and input to the Marine Corps Master Plan. This program has moved to Project C2510 within this Program Element (PE) in FY04 and beyond.
7. Balloon Upgrade - The Marine Corps Stationary Lighter Than Air Platform (MCSLAP) program provides for the Marine Corps' only expeditionary capability to rapidly extend voice and data communications beyond line of sight. Small and medium tactical aerostat exist today in commercial off-the-shelf configurations that require minimal adaptation to meet basic USMC operational requirements. A lightweight, durable, stationary liftable platform is designed for extending Marine Air Ground Task Force (MAGTF) Command, Control, Communications, Computers, and Intelligence (C4I) communications range capabilities.

**(U) B. ACCOMPLISHMENTS/ PLANNED PROGRAM:**

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.600</b>	<b>1.188</b>	<b>1.192</b>
RDT&E Articles Qty			

**JWID:** Participation in JWID, a JCS mandated program, to demonstrate new C4I interoperability concepts. It also supports management and planning of future JWID exercises.

**UNCLASSIFIED**

EXHIBIT R-2a, RDT&E Project Justification		DATE:		
		<b>February 2004</b>		
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME		
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Systems</b>	<b>C2277 Systems Engineering &amp; Integration</b>		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.927</b>	<b>1.712</b>	<b>1.778</b>	
RDT&E Articles Qty				
<b>JINTACCS:</b> Participation in JINTACCS, a JCS-mandated program aimed at ensuring interoperability of tactical systems. Analysis Engineering and technical support in developing joint standards. Interoperability testing/certification in support of C4I systems. Technical support in various joint programs and ACTD's.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>4.517</b>	<b>4.242</b>	<b>3.377</b>	
RDT&E Articles Qty				
<b>MAGTF SEI&amp;C:</b> Engineering and technical support for configuration management of MAGTF C4I systems and its migration to the DII COE. Assist Program Group Managers in meeting C4I Support Plans (KPPs). Maintain MSTAR system as technical roadmap to MAGTF C4I system integration. Analysis, studies and reviews in the development and implementation of the COE migration strategy. Analyze the movement of MAGTF C4I systems to joint standards to mandated levels and provide technical recommendations to correct deficiencies. Engineering support to D-30 Amphib Ready Group (ARG) preparation process.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.382</b>	<b>1.620</b>	<b>1.613</b>	
RDT&E Articles Qty				
<b>MAGTF SEI&amp;C (JDEP):</b> DoD mandated program to evaluate the interoperability of the Family of Systems (FoS) C4ISR configurations that support joint forces, evaluate the interoperability of new acquisition systems, and provide an environment for engineering analysis to correct systems deficiencies and develop new capabilities.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>1.333</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>Ballon Upgrade:</b> Active testing and utilization of Aerostat Ballon to test concepts for USMC connectivity to USN Battle Groups.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.172</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>GBS:</b> Support and Management for Confidence/User Evaluation.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.987</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>CCR MCHS:</b> Research, evaluation, test and selection of computer hardware products for the Marine Corps Common Hardware Suite (MCHS). Development of MCHS system specifications and baselines; research and analyze computer technologies and hardware; conduct performance, compatibility and environmental testing; support commercial product selection and application in support of Tactical Systems.				
<b>(U) Total \$</b>	<b><u>8.918</u></b>	<b><u>8.762</u></b>	<b><u>7.960</u></b>	

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EXHIBIT R-2a, RDT&E Project Justification				DATE: <b>February 2004</b>					
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>		PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Systems</b>			PROJECT NUMBER AND NAME <b>C2277 Systems Engineering &amp; Integration</b>				
<b>(U) PROJECT CHANGE SUMMARY:</b>									
		<b>FY2003</b>	<b>FY2004</b>	<b>FY2005</b>					
<b>(U) FY 2004 President's Budget:</b>		<b>10.736</b>	<b>8.907</b>	<b>7.991</b>					
(U) Adjustments from the President's Budget:									
(U) Congressional Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings		-1.635							
(U) SBIR/STTR Transfer		-0.183							
(U) Minor Affordability Adjustment			-0.145	-0.031					
<b>(U) FY 2005 NAVCOMPT Budget:</b>		<b>8.918</b>	<b>8.762</b>	<b>7.960</b>					
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b>									
	<u>Line Item No. &amp; Name</u>	<u><b>FY 2003</b></u>	<u><b>FY 2004</b></u>	<u><b>FY 2005</b></u>	<u><b>FY 2006</b></u>	<u><b>FY 2007</b></u>	<u><b>FY 2008</b></u>	<u><b>FY 2009 To Compl</b></u>	<u><b>Total Cost</b></u>
PMC BLI	463000 CCR	30.720	61.062	61.989	70.980	87.812	88.869	103.734	Cont Cont
PMC BLI	436600 RADIO SYSTEMS	49.231	23.658	14.476	16.351	10.694	26.827	10.340	Cont Cont
<b>(U) Related RDT&amp;E:</b>									
(U) PE 0604817A									
(U) PE 0206623M, Marine Corps Ground Combat/Supporting Arms Systems									
<b>(U) D. ACQUISITION STRATEGY JWID, JINTACCS MAGTF SE&amp;IC, GBS, AND CCR:</b> Work will be led in-house. Necessary contractor support will be acquired using already existing contracts.									
<b>CCR - T&amp;E</b> - Naval Service Warfare Center/Command NSWC/CD will procure Computer Hardware as noted under selected MCHS and non-MCHS systems for battery and environmental testing. NSWC/CD shall provide written test results showing the facts determined in the battery and environmental testing.									
<b>(U) E. Major Performers:</b> FY02-FY05 Northrup Grumman, Stafford VA - Level of effort contract for logistics support, engineering, analytical, acquisition and program management for C4I programs in the areas of systems architectures, configuration management, interoperability and integration.									

Exhibit R-3 Cost Analysis							DATE: <b>February 2004</b>					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NUMBER AND NAME						
<b>RDTE,N /BA 7 Operational Sys Dev</b>			<b>0206313M Marine Corps Communication Systems</b>			<b>C2277 Systems Engineering &amp; Integration</b>						
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JWID	MPR	JPO Ft Monmouth NJ	1.377	0.600	12/02	0.640	12/03	0.680	12/04	Cont.	Cont.	
JWID	WR	MCSC Quantico, VA	0.073	0.000		0.022	10/03	0.029	10/04	Cont.	Cont.	
BALLOON UPGRADE	MIPR	NSWC Crane IN	1.082	1.333	07/03							2.415
<b>Subtotal Product Dev</b>			<b>2.532</b>	<b>1.933</b>		<b>0.662</b>		<b>0.709</b>		Cont.	Cont.	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
JWID	C/FFP	NGIT, Stafford VA	1.176			0.526	10/03	0.483	10/04	Cont.	Cont.	
MAGTF SEI&C	MIPR	CECOM Ft Monmouth NJ	0.665	0.673	01/03					Cont.	Cont.	
MAGTF SEI&C	C/FFP	NGIT, Stafford VA	0.610	0.857	10/02	1.736	10/03	1.449	10/04			4.652
MAGTF SEI&C	WR	MCSC, Quantico, VA	0.508	0.110	10/02	0.144	10/03	0.123	10/04	Cont.	Cont.	
MAGTF SEI&C	C/FFP	OSEC Stafford VA	0.252							0.000	0.252	
MAGTF SEI&C	WR	NSWC Crane IN	0.228	0.158	10/02					0.000	0.386	0.322
JCIET	RCP	MCSC, Quantico, VA		0.369	01/03							
JCIET	WR	MCSC, Quantico, VA	0.508	0.020	10/02							
JCIET	WR	NSWC Crane IN	0.228	0.400	10/02							
JCIET	WR	MCTSSA, Cp Pndlt, CA	0.120	0.058	04/03							
JCIET	RCP	MCTSSA, Cp Pndlt, CA		0.125	09/03							
JCIET	WR	MCSFB		0.015	09/03							
MAGTF SEI&C (JDEP)	WR	NSWC Dahlgren, VA	0.068	0.083	01/03	0.120	01/04	0.129	01/05	Cont.	Cont.	
MAGTF SEI&C (JDEP)	T&M	SENSIS Syracuse NY	0.547	0.046	05/03	1.164	05/04	1.089	05/05	Cont.	Cont.	
MAGTF SEI&C (JDEP)	MPR	DISA	0.007	0.010	02/03	0.010	02/04	0.012	02/05	Cont.	Cont.	
MAGTF SEI&C (JDEP)	WR	MCTSSA, Cp Pndlt, CA	0.120	0.243	04/03	0.326	04/04	0.380	04/05	Cont.	Cont.	
CCR	Various	Various	0.395	0.240	12/02					Cont.	Cont.	
CCR	MPR	GSA	0.802	0.411	03/03					Cont.	Cont.	
CCR	RCP	MCSC, Quantico, VA	0.037	0.037	03/03					Cont.	Cont.	
<b>Subtotal Support</b>			<b>6.271</b>	<b>3.855</b>		<b>4.026</b>		<b>3.665</b>		Cont	Cont	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MAGTF SEI&C	C/FFP	NGIT, Stafford VA		1.552	10/02	2.126	10/03	1.606	10/04	Cont.	Cont.	
JINTACCS	C/FFP	NGIT, Reston		0.909	10/02	1.507	10/03	1.570	10/04	Cont.	Cont.	
JINTACCS	WR	MCTSSA, Cp Pndlt, CA	0.364	0.018	10/02	0.205	10/03	0.208	10/04	Cont.	Cont.	
GBS	WR	MCTSSA, Cp Pndlt, CA	0.441	0.172	08/03					0.000	0.613	0.440
CCR	RCP	MCSC, Quantico, VA	2.065	0.299	02/03					Cont.	Cont.	
<b>Subtotal T&amp;E</b>			<b>2.870</b>	<b>2.950</b>		<b>3.838</b>		<b>3.384</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
MAGTF SEI&C	C/FFP	NGIT, Stafford VA		0.180	10/02	0.236	10/03	0.202	10/04	Cont.	Cont.	
<b>Subtotal Management</b>				<b>0.180</b>		<b>0.236</b>		<b>0.202</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
<b>Total Cost</b>				<b>8.918</b>		<b>8.762</b>		<b>7.960</b>		<b>Cont.</b>	<b>Cont.</b>	

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<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>						<b>DATE: February 2004</b>			
<b>APPROPRIATION/BUDGET ACTIVITY</b> RDT&E, N /BA-7 Operational Sys Dev		<b>PROGRAM ELEMENT NUMBER AND NAME</b> 0206313M Marine Corps Communications Sys				<b>PROJECT NUMBER AND NAME</b> C2278 Air Defense Weapons Systems			
<b>COST (\$ in Millions)</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>Cost to Complete</b>	<b>Total Program</b>
Project Cost	23.238	23.338	22.765	6.429	11.075	10.537	5.798	Cont	Cont
RDT&E Articles Qty									

**(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:**

(U) This project encompasses two sub-element programs which are part of the Integrated Air Defense System for the Marine Corps.

1. Combat ID (CID) will provide rapid and accurate determination of friends, foes, or neutral identities of all potential targets within a combatant's area of responsibility in time to take decisive action. It will enable fighting forces: to manage and control battlespace; optimally employ weapons and forces to increase the economy of force; lower combat attrition, and increase enemy losses while reducing fratricide. CID must be viewed as a capability which will be satisfied by fielding a Family of Systems (FoS). Beginning in FY-04 the USMC will focus on providing a Mounted Cooperative Target Identification System (MCTIS) for direct fire and combat support vehicles. This system will specifically provide the capability for Mounted Weapon Systems to accurately identify friendly platforms on the battlefield which will improve combat effectiveness and reduce fratricide. This program will transition to MCTIS in FY04.
2. The Complementary Low Altitude Weapons System (CLAWS) is a mobile ground based air defense missile system designed to defeat threat cruise missiles unmanned aerial vehicles, rotary wing and fixed wing aircraft. CLAWS shall provide a rapidly deployable, mobile, high firepower, all-weather, standoff air defense system to defend Marine Expeditionary Forces and Naval Forces from attack by cruise missiles, aircraft and UAVs. It shall complement existing Short Range Air Defense (SHORAD) capabilities and shall interface with current and proposed Marine Air Command and Control Systems, sensors, and data paths.
3. The Continuous Wave Acquisition Radar (CWAR) will investigate, integrate, and test safety and diminishing source issues related to CWAR specifically with the intention of increasing the fleet's system maintainability and reliability. The AN/MPQ-62 Marine Requirements Oversight Council (MROC) Phase Out decision was approved in Jan 03, and phase out will begin in 4th Quarter FY03. This program will transition to Short/Medium Range Air Defense Radar. Funding for the Short/Medium Range Air Defense Radar has moved to Project C3099 within this PE in FY04 and beyond.
4. The Composite Tracking Network, formerly know as Cooperative Engagement Capability (CEC), enables all CTN-equipped, Anti-Air Warfare (AAW) weapons systems in a battle force to operate as a single, distributed AAW weapon system. This is accomplished providing timely sharing of fire control quality sensor data, correlated identification data, and AAW weapons management status. The sensor networking capability of CTN essentially allows forces to have a direct connection to the various sensors supported by forces throughout a battlefield enabling the development of a common understanding of the air situation. CTN consists of common processing units that interface with local and remote sensor data in order to develop a common track database and data communications pieces that enable the connectivity and networking of the sensors and processors. Funding for this program has moved to Project C2273 within this PE in FY04 and beyond.
5. The Low Altitude Air Defense (LAAD) Sustainment program provides the LAAD Battalions with the technologies/equipment required to maintain a Short Range Air Defense (SHORAD) capability in support of the Marine Air Ground Task Force (MAGTF), and provides lifecycle sustainment support, training, and integration for current/future LAAD specific equipment which includes air defense missiles, PMS, and CLAWS. The LAAD Sustainment Program supports the Stinger and AMRAAM based weapon systems by managing five separate areas: Expeditionary Air Defense Systems (EADS) hardware and software, Trainers and Simulators, Missiles, Ground Support Equipment (GSE), and targets.
6. The Multi-Role Radar System (MRRS) will provide lightweight, expeditionary, three-dimensional radar capable of detecting Cruise Missiles (CMs), fixed and rotary winged aircraft, Unmanned Aerial Vehicles (UAV's) and an enhanced Combat Identification (CID) capability. The system will augment the AN/TPS-59(V)3 sensor coverage and will be integrated into the Navy's Cooperative Engagement Capability (CEC) and the Marine Corps Composite Tracking Network (CTN). Additionally, the system shall provide Air Traffic Control (ATC) with a real time display of all air activity within the assigned area of responsibility and will support the situational awareness and cuing for Stinger, Avenger, and CLAWS. Funding for this program has moved to Project C3099 within this PE in FY04 and beyond.
7. Pedestal Mounted Stinger (PMS) or "Avenger" is a turreted, lightweight, highly mobile gun/missile hybrid mounted on a heavy HMMWV. The system delivers eight ready to fire Stinger missiles and 285 rounds of .50 caliber ammunition in a single upload. An upgraded Land Navigation System assists the slew-to-cue capability and the Forward Looking Infra Red Device provides a day/night and reduced visibility capability.

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**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME  
**0206313M Marine Corps Communications Sys**

PROJECT NUMBER AND NAME  
**C2278 Air Defense Weapons Systems**

8. The Short/Medium Range Air Defense Radar will develop engineering change proposals related to improved system performance with the specific purpose of meeting increased fleet operational requirements. As part of this effort, AN/TPS-63 modifications and system improvements will be researched and analyzed which complement existing components to preclude an expensive USMC investment in solid-state radar technology. Funding for this project has moved to Project C3099 in FY04 and beyond.

9. Mounted Cooperative Target ID System (MCTIS) - will be a cooperative battlefield target identification device that employs encrypted, Ka band, millimeter wave, question and answer technology. It will consist of interrogator and transponder antennae, transceiver, and communications/electrical interface unit. It will be fielded as two variants: interrogator/transponder system for AAVs, LAVs, and M1A1s; and transponder-only system for combat support and combat service support vehicles. When fielded, mounted weapon systems will have the capability to identify targets as friendly or unknown, at ranges to 6 km, before engaging them. They and all other designated vehicles will also possess the capability to rapidly identify themselves as friendly to weapon systems equipped with comparable systems prior to being engaged. As a result, incidents of fratricide and collateral damage will decline, while the range at which targets may be engaged without fear of misidentification will increase dramatically. The system will be interoperable with Joint, Allied, and coalition forces' cooperative target identification systems.

**(U) B. ACCOMPLISHMENTS/ PLANNED PROGRAM:**

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.211</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**CWAR:** Developmental test and evaluation.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.600</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**CID:** Program management support.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.374</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**CID:** Requirements development.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.406</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**CID:** Engineering analysis of CID systems in coordination with the Coalition CID ACTD program.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.999</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**SHORT/MEDIUM RANGE AIR DEFENSE RADAR:** Developmental test and evaluation/risk reduction.

COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.150</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			

**SHORT/MEDIUM RANGE AIR DEFENSE RADAR:** Development of Engineer Design Model.

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<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>	<b>0206313M Marine Corps Communications Sys</b>	<b>C2278 Air Defense Weapons Systems</b>		
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.110</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>SHORT/MEDIUM RANGE AIR DEFENSE RADAR:</b> Program management support. Funding for this program has moved to C3099 within this PE for FY04 and beyond.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>1.837</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>CTN:</b> Software development: IDD development for CAC2S and CLAWS interface to CTN.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>4.444</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>CTN:</b> Development of Engineer Design Model.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.919</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>CTN:</b> Testing and Evaluation: Developmental testing support. Certification of CAC2S and CLAWS interfaces to CTN.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.527</b>	<b>0.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>CTN:</b> Program management support. Funding for this program has been moved to Project C2273 within this PE for FY 04 and beyond.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>2.862</b>	<b>4.010</b>	<b>4.894</b>	
RDT&E Articles Qty				
<b>CLAWS:</b> Development, design, test and integration issues related to the four Production Representative Vehicles. Perform Key Performance Parameter (KPP).				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>3.432</b>	<b>1.194</b>	<b>7.996</b>	
RDT&E Articles Qty				
<b>CLAWS:</b> Developmental Testing (DT).				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>7.622</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>CLAWS:</b> Operational Testing (OT).				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>3.282</b>	<b>6.199</b>	<b>5.497</b>	
RDT&E Articles Qty				
<b>CLAWS:</b> Program management support.				

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APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>		PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Sys</b>	<b>February 2004</b>
PROJECT NUMBER AND NAME <b>C2278 Air Defense Weapons Systems</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.633</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Developmental test and evaluation/risk reduction.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.993</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Refinement of the ORD, Campaign Level Effectiveness Analysis, Analysis of Alternatives and Life Cycle Cost Estimate.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.198</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Study on the reliability of the fourth mission area - counter battery.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.917</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Program Management Support. Funding for this program has been moved to C3099 within the same PE for FY04 and beyond.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.022</b>	<b>0.300</b>	<b>0.684</b>
RDT&E Articles Qty			
<b>LAAD SUSTAINMENT:</b> Development of replacement for Remote Terminal Unit (RTU).			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.149</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>LAAD SUSTAINMENT:</b> Upgrades to EADS 7.4 software.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.048</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>LAAD SUSTAINMENT:</b> Hazards of Electromagnetic Radiation to Ordnance (HERO) testing.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.828</b>	<b>1.000</b>
RDT&E Articles Qty			
<b>LAAD SUSTAINMENT:</b> Development of EADS 8.0.x - future upgrades to EADS software running on replacement RTU.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.100</b>	<b>0.100</b>
RDT&E Articles Qty			
<b>LAAD SUSTAINMENT:</b> Address obsolescence issues with Stinger Ground Support Equipment as indicated by Readiness Prediction Study.			

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RDT&E, N /BA-7 Operational Sys Dev		0206313M Marine Corps Communications Sys	C2278 Air Defense Weapons Systems
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.000	0.450
RDT&E Articles Qty			
LAAD SUSTAINMENT: Development of Singer missile training system.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.000	0.200
RDT&E Articles Qty			
LAAD SUSTAINMENT: Integration of High Pressure Pure Air Generator (HiPPAG) into Avenger Weapon System.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.030	0.029
RDT&E Articles Qty			
LAAD SUSTAINMENT: Program Management Support.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.095	0.000
RDT&E Articles Qty			
LAAD SUSTAINMENT: Stinger Missile Shelf Life Study.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.000	1.039
RDT&E Articles Qty			
MCTIS: Program management support.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.000	0.500
RDT&E Articles Qty			
MCTIS: Test and evaluation as part of the coalition CID ACTD program.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.000	0.225
RDT&E Articles Qty			
MCTIS: Engineer Design Model.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.000	0.150
RDT&E Articles Qty			
MCTIS: Risk reduction.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		0.000	0.000
RDT&E Articles Qty			
MCTIS: Support software development.			

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APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
RDT&E, N /BA-7 Operational Sys Dev	0206313M Marine Corps Communications Sys		C2278 Air Defense Weapons Systems	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.000	0.462	0.000	
RDT&E Articles Qty				
<b>PEDESTAL MOUNTED STINGER:</b> Test and evaluation/risk reduction of FLIR for Avenger.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.000	0.030	0.030	
RDT&E Articles Qty				
<b>PEDESTAL MOUNTED STINGER:</b> Engineering support for follow-on initiatives.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	0.000	0.000	0.160	
RDT&E Articles Qty				
<b>PEDESTAL MOUNTED STINGER:</b> Initiate developmental test and evaluation/risk reduction of Laser Range Finder and Slip Ring for Avenger. Initiate engineering and integration of Laser Range Finder and Slip Ring for Avenger.				
(U) Total \$	<u>23.238</u>	<u>23.338</u>	<u>22.765</u>	
<b>(U) PROJECT CHANGE SUMMARY:</b>				
	<u>FY2003</u>	<u>FY2004</u>	<u>FY2005</u>	
<b>(U) FY 2004 President's Budget:</b>	28.274	23.428	9.596	
(U) Adjustments from the President's Budget:				
(U) Congressional Program Reductions				
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	-2.416	0.188	13.568	
(U) SBIR/STTR Transfer	-0.494			
(U) Minor Affordability Adjustment	-2.126	-0.278	-0.399	
<b>(U) FY 2005 Presidents Budget:</b>	23.238	23.338	22.765	
CHANGE SUMMARY EXPLANATION:				
(U) Funding: See Above.				
(U) Schedule: Not Applicable				
(U) Technical: Not Applicable.				

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APPROPRIATION/BUDGET ACTIVITY  
**RDT&E, N /BA-7 Operational Sys Dev**

PROGRAM ELEMENT NUMBER AND NAME  
**0206313M Marine Corps Communications Sys**

PROJECT NUMBER AND NAME  
**C2278 Air Defense Weapons Systems**

**(U) C. OTHER PROGRAM FUNDING SUMMARY:**

<u>Line Item No. &amp; Name</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC LINE BLI 300600 LAAD SUSTAINMT	0.065	1.981	10.314	12.083	14.642	6.011	13.519	Continuing	Continuing
(U) PMC LINE BLI 462000 CWAR (EADS)	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0	1
(U) PMC LINE BLI 464000 CTN	0.000	0.000	0.000	22.477	34.840	43.993	68.803	Continuing	Continuing
(U) PMC LINE BLI 464000 MCTIDS (CID)	0.000	0.000	0.000	0.000	0.000	0.500	15.300	Continuing	Continuing
(U) PMC LINE BLI 489000 CLAWS	0.000	0.000	4.412	26.661	28.145	19.737	3.618	Continuing	Continuing
(U) PMC LINE BLI 305000 CLAWS MISSILES	0.000	0.000	0.000	22.611	19.251	49.209	24.410	Continuing	Continuing
(U) PMC LINE BLI 464000 SH/MED RANGE AIR	0.707	0.000	0.000	0.000	0.000	0.000	0.000	0	0.976
(U) PMC LINE BLI 464200 SH/MED RANGE AIR	0.000	1.569	1.421	0.526	0.436	0.443	0.448	Continuing	Continuing
(U) PMC LINE BLI 464200 MRRS	0.000	0.000	0.000	2.058	33.046	45.654	46.900	Continuing	Continuing
(U) PMC LINE BLI 301300 PMS	1.648	0.811	10.004	6.470	9.520	3.463	8.671	Continuing	Continuing

**(U) Related RDT&E:**

PE 0603216C (Ballistic Missile Defense Organization, Theater Missile Defense)

**(U) D. ACQUISITION STRATEGY:**

(U) CID: This effort will continue the management of the CID program as it transitions to MCTIS (Mounted Cooperative Target Identification System) in FY04. The program will leverage heavily from the Coalition CID ACTD program and will allow for engineering analysis of competing systems as the possible MCTIS solution.

(U) CLAWS: CLAWS will integrate government furnished equipment (GFE), non-developmental items (NDI) and new technology to develop a surfaced launched Anti-Air launcher. CLAWS will utilize the AMRAAM (current inventory DoD missile), existing High Mobility Multi-purpose Wheeled Vehicle (HMMWV) and contractor developed missile launch platform.

(U) CWAR: This effort requires R&D funds to develop, procure, install and maintain modifications to keep the Marine Air Command and Control System radar's electronics, hardware, and software viable and safe; provide upkeep of the system. Efforts are underway with APM AD weapons to award an Engineering Services and procurement contract with Raytheon Corporation. The main focus for the contract will be for the procurement of the AN/MPQ-62 Continuous Wave Acquisition Radar (CWAR), Built in Test Equipment (BITE) Diagnostics upgrade which replaces five major sub-assemblies resulting in a substantial reduction in obsolete components, an increase in system reliability and maintainability, as well as addressing any significant safety issues. The AN/MPQ-62 Marine Requirements Oversight Council (MROC) Phase Out decision was approved in Jan 03, and phase out will begin in the 4th Qtr of

(U) CTN: The USMC's CTN acquisition strategy is to participate in the USN's Program procurement and testing, making necessary modifications to support the Marine Corps requirement. The USMC CTN project will be utilizing existing and future USN CEC contracts.

(U) LAAD SUSTAINMENT: The LAAD Sustainment acquisition strategy is to repair, sustain, or replace LAAD systems experiencing readiness degradation due to obsolescence. Examples include the replacement of RemoteTerminal Units, shelf life extensions to USMC Stinger Missiles, upgrading trainers to tactical configuration, upgrading the present target configurations, and the replacement of Stinger Night sights. LAAD Sustainment will leverage Army interests in every available endeavor. Teaming with the Army will afford the USMC the best quantity of buy opportunities.

(U) MRRS: The MRRS will build off of the ONR Affordable Ground Based Radar Science and Technology program that will demonstrate advanced mobility combined with medium range and high resolution.

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**0206313M Marine Corps Communications Sys**

**C2278 Air Defense Weapons Systems**

(U) PEDESTAL MOUNTED STINGER: This effort requires R&D funds to conduct interface testing of new equipment with USMC unique configuration to ensure requirements are maintained to keep the PMS viable, safe, and provide sustainment of the fielded weapon system. The USMC PMS project will utilize existing and future In-Service Engineering Activities.

(U) SHORT/MEDIUM RANGE AIR DEFENSE RADAR: This effort requires R&D funds to develop, procure, install, and maintain modifications to keep the Short/Medium Range Air Defense radar system's electronics and hardware viable and safe, and to provide sustainment of the fielded system. Efforts are underway to award a sole source Engineering Services & procurement contract with the AN/TPS-63's Original Equipment Manufacturer, Northrop Grumman. The main focus for the contract is the development and procurement of replacement sub-assemblies currently identified as containing obsolete components, as well as those assemblies experiencing reliability, maintainability and safety-related issues.

(U) MCTIS: Economy of scales dictate a strategy that highly leverages Joint/coalition evolutionary development efforts. The FY03 through FY05 Coalition Combat ID Advanced Concept Technology Demonstration (CCID ACTD) process will evaluate several millimeter wave (mmW) Target Identification systems with the objective of identifying the best system to satisfy the Marine Corps requirement. FY-04/05 efforts will focus on unique system integration efforts required on Marine Corps vehicles not already accomplished through similar Joint efforts. It is anticipated system procurement acquisition will be accomplished on a Joint/coalition basis to take advantage of parallel support efforts.

**(U) E. MAJOR PERFORMERS:**

**COMPOSITE TRACKING NETWORK:**

FY03 NSWC, Crane, IN, Engineering services. Jan 03

**CLAWS:**

FY03 Raytheon, Tewksbury MA - Product development and developmental test -Nov 02

FY03 MCSC, Quantico VA - CEOSS Omnibus Contract program support - Dec 02

FY04 Raytheon, Tewksbury, MA. Product development and developmental test. Jan 04

FY05 Raytheon, Tewksbury, MA. Product development and developmental test. Jan 04

**MCTIS:**

Anteon Corporation, Arlington, VA. Engineering and Technical services. Jan 04

**LAAD SUSTAINMENT**

FY05 Raytheon, Tewksbury, MA Product development. Jan 05

Exhibit R-3 Cost Analysis						DATE: February 2004						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206313M Marine Corps Communication Sys				C2278 Air Defense Weapons Systems					
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CWAR	MIPR	Redstone Arsenal, AL	0.000	0.211	01/03					Cont.	Cont.	
S/M Range Air Defense Rdr	MIPR	Redstone Arsenal, AL	0.100	0.925	03/03					0.000	1.025	0.925
CTN	RCP	Lockheed, Syracuse NY	0.699	0.140	12/03					Cont.	Cont.	
CTN	WR	NSWC, Crane, IN	2.910	2.517	06/03					Cont.	Cont.	
CTN	RCP	Raytheon, St Ptrsbrg, FL	0.873	1.096	06/03					Cont.	Cont.	
CTN	RCP	NAWC, PaxRiver, MD	0.000	2.000	03/03					0.000	2.000	2.000
CTN	WR	SPAWAR (EMA, Inc.)	0.000	0.020	04/03					0.000	0.020	0.020
CTN	RCP	Solipsys, Laurel, MD	1.081	1.000	01/03					Cont.	Cont.	
CID/MCTIS	WR	NSWC, Crane, IN	0.000	0.176	11/03			0.213	01/05	Cont.	Cont.	
CLAWS	RCP	Raytheon, Bedford, MA	9.609	2.700	01/03	3.805	01/04	3.789	01/05	Cont.	Cont.	
CLAWS	MIPR	Pt Mugu, Ca	0.000	0.030	12/02	0.010	01/04	0.121	01/05	Cont.	Cont.	
MRRS	MIPR	Redstone Arsenal, AL	0.000	0.633	03/03					Cont.	Cont.	
MRRS	RCP	MCSC, Quantico, VA	0.000	0.250	03/03					0.000	0.250	0.250
LAAD SUSTAINMENT	WR	NSWC, Crane, IN	0.000	0.000		0.379	01/04	0.750	01/05	Cont.	Cont.	
LAAD SUSTAINMENT	RCP	MCSC, Quantico, VA	0.000	0.000		0.200	01/04	0.200	01/05	Cont.	Cont.	
LAAD SUSTAINMENT	RCP	MCSC, Quantico, VA	0.000	0.000		0.450	01/04			0.000	0.450	0.450
LAAD SUSTAINMENT	RCP	Raytheon, Tewksbury, MA	0.000	0.219	03/03	0.828	01/03	1.000	01/05	Cont.	Cont.	
PMS	WR	NSWC, Crane, IN				0.402	01/04	0.080	01/05	Cont.	Cont.	
<b>Subtotal Product Dev</b>			<b>15.272</b>	<b>11.917</b>		<b>6.074</b>		<b>6.153</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
SH/Med Rng Air Def Radar	WR	NSWC, Crane, IN	0.090	0.060	12/02					Cont.	Cont.	
SH/Med Rng Air Def Radar	RCP	Northrup Grumman,	0.000	0.274	01/03					Cont.	Cont.	
CIDMCTIS	RCP	MCSC, Quantico, VA	0.576	0.371	06/03	0.127	01/04	0.374	01/05	0.000	1.448	0.652
CIDMCTIS	WR	NSWC, Crane, IN	0.150	0.233	02/03	0.225	10/03	0.225	01/05	0.000	0.833	
CIDMCTIS	WR	MCSC, Quantico, VA	0.000	0.030	10/03	0.030	01/04	0.030	01/05	Cont.	Cont.	
CTN	WR	MCSC, Quantico, VA	0.115	0.040	10/02					Cont.	Cont.	
CTN	MIPR	Defense Cont. Cmd	0.000	0.150	05/03					0.000	0.150	
CLAWS	WR	NSWC, Crane, IN	0.170	0.250	12/03			0.987	01/05	Cont.	Cont.	
CLAWS	WR	MCSC, Quantico, Va	0.180	0.200	01/03	0.358	12/03	1.205	01/05	Cont.	Cont.	
CLAWS	WR	MCCDC, Quantico, VA	0.000	0.200	01/03			0.900	01/05	Cont.	Cont.	
CLAWS		MCOTEA	0.000			0.666	01/04			Cont.	Cont.	
CLAWS	MIPR	JSPO, Eglin, AFB, FL	0.000			0.504	12/03			Cont.	Cont.	
CLAWS	WR	MCTSSA, Cp Pndltn,CA	0.000			0.571	01/04			Cont.	Cont.	

Exhibit R-3 Cost Analysis							DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Dev			0206313M Marine Corps Communication Sys				C2278 Air Defense Weapons Systems					
LAAD SUSTAINMENT	WR	MCSC, Quantico, VA	0.000	0.030	12/02	0.050	12/03	0.051	12/04	Cont.	Cont.	
LAAD SUSTAINMENT	MIPR	Redstone Arsenal, AL	0.000	0.095	12/03					0.000	0.095	
MRRS	MIPR	Jnt Spectrum Ctr, Annapolis	0.000	0.202	04/03					0.000	0.202	
MRRS	RCP	MCSC, Quantico, VA	0.000	0.336	03/03					Cont.	Cont.	
MRRS	MIPR	ONR Arlington, VA	0.000	0.198	08/03					Cont.	Cont.	
MRRS	MIPR	GSA, Bremerton, WA	0.000	0.040	04/03					0.000	0.040	
MRRS	WR	NSWC, Crane IN	0.000	0.165	12/02					Cont.	Cont.	
<b>Subtotal Support</b>			<b>1.281</b>	<b>2.874</b>		<b>2.531</b>		<b>3.772</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CID/MCTIS	WR	CECOM, Ft Monmouth	0.000	0.000		0.532	01/04	0.600	01/05	Cont.	Cont.	
CTN	WR	MCTSSA, Cp Pndlt,CA	0.035	0.005	10/02					Cont.	Cont.	
CLAWS	WR	White Sands, NM	0.100	1.000	01/03	0.969	12/03	0.798	12/04	0.000	2.867	
CLAWS		MCOTEA	0.125	0.140	10/02	0.537	12/03	0.160	12/04	Cont.	Cont.	
CLAWS	MIPR	Aberdeen, Md	0.142	0.039	02/03	0.341	12/03	0.301	12/04	Cont.	Cont.	
CLAWS	RCP	Raytheon, Tewksbury, MA	0.000	2.803	03/03	2.171	12/03	1.600	12/04	Cont.	Cont.	
CLAWS	RCP	MCTSSA, Cp Pndlt,CA	0.000	0.024	03/03			0.315	12/04	Cont.	Cont.	
CLAWS	MIPR	JSPO, Eglin, AFB, FL	0.000	0.150	12/02	1.671	12/03	2.700	12/04	Cont.	Cont.	
CLAWS	MIPR	Redstone Arsenal, AL	0.000	0.590	09/03	1.222	12/03	1.733	12/04	Cont.	Cont.	
PMS	RCP	Boeing, Huntsville, AL				0.060	01/04	0.080	01/05	Cont.	Cont.	
<b>Subtotal T&amp;E</b>			<b>0.402</b>	<b>4.751</b>		<b>7.503</b>		<b>8.287</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CTN	RCP	MCSC (Mevatec)	0.000	0.027	03/03					Cont.	Cont.	
CTN	RCP	NGIT, Stafford, VA	0.868	0.732	06/03					Cont.	Cont.	
CIDMCTIS	RCP	Anteon, Stafford, VA	0.000	0.570	01/03	1.000	01/04	0.745	01/05	Cont.	Cont.	
MRRS	WR	MCSC, Quantico, VA	0.000	0.156	01/03					Cont.	Cont.	
MRRS	RCP	Anteon, Stafford, VA	0.000	0.761	01/03					Cont.	Cont.	
CLAWS	RCP	NGIT, Stafford, VA	1.579	1.200	09/02	1.656	11/03	1.700	12/04	Cont.	Cont.	
CLAWS	RCP	MCSC, Quantico	0.000	0.250	09/02	2.932	12/03	2.078	12/04	Cont.	Cont.	
CLAWS	WR	NSWC Crane, IN	0.000	0.000		0.756	12/03			Cont.	Cont.	
CLAWS	WR	Redstone Arsenal, AL	0.000	0.000		0.856	12/03			Cont.	Cont.	
PMS						0.030	12/03	0.030	12/04	Cont.	Cont.	
<b>Subtotal Management</b>			<b>2.447</b>	<b>3.696</b>		<b>7.230</b>		<b>4.553</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
<b>Total Costs</b>				<b>23.238</b>		<b>23.338</b>		<b>22.765</b>		<b>Cont.</b>	<b>Cont.</b>	





Exhibit R-4/4a Project Schedule/Detail

DATE:

February 2004

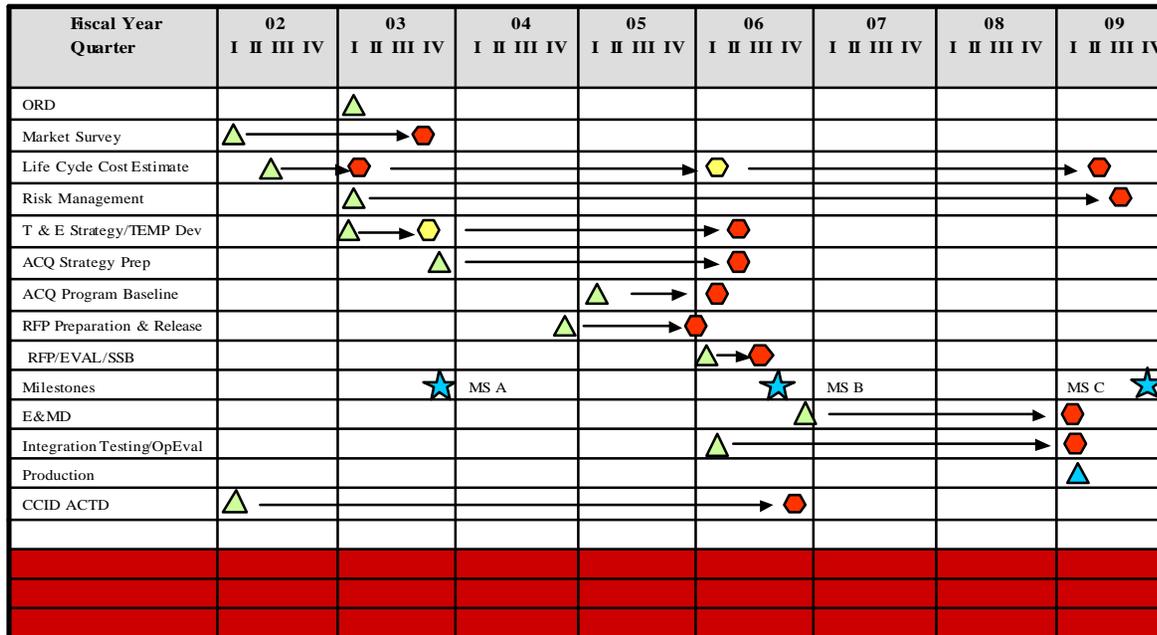
APPROPRIATION/BUDGET ACTIVITY  
RDT&E, N /BA 7 Operational Sys Dev

PROGRAM ELEMENT  
0206313M Marine Corps Communication Sys

PROJECT NUMBER AND NAME  
C2278 Air Defense Weapons Systems



# MCTIS Program Schedule



**Program Funding Summary**

(APPN, BLI #, NOMEN)

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
(U) R&D Air Def Weaps Sys (Combat ID) C2278	1.380	0.000	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
(U) RDT&E,N ADWS (MCTIDS) C2278	0.000	1.914	2.187	2.829	6.687	7.159	2.340	Continuing	Continuing
(U) PMC BLI# 464000 Air Ops C2 Systems (MCTIDS)	0.000	0.000	0.000	0.000	0.000	0.500	15.300	Continuing	Continuing



# UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>February 2004</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Sys Development</b>		PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communication Systems</b>				PROJECT NUMBER AND NAME <b>C2315 Training Devices/Simulators</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	<b>7.277</b>	<b>12.278</b>	<b>4.863</b>	<b>8.267</b>	<b>5.634</b>	<b>4.284</b>	<b>4.443</b>	<b>Cont</b>	<b>Cont</b>
RDT&E Articles Qty									
<b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>									
<p>(U) Training simulators supported by this program element include Joint Simulation System (JSIMS), Closed Loop Artillery Simulation System (CLASS), Multiple Integrated Laser Engagement System (MILES 2000), Special Effect Small Arms Marking System (SESAMS), and Combined Arms Command &amp; Control Training Upgrade System (CACCTUS). These training systems provide tactical weapons and decision-making skill training from entry level through Marine Air-Ground Task Force (MAGTF) staff level. CLASS integrates Marine Corps training requirements with AFATDS (Advanced Field Artillery Tactical Data System). Together these systems will be interoperable and will allow for mission planning, mission rehearsal and concept evaluation in a valid synthetic environment with objective, timely feedback. Through live, virtual and constructive simulation, the Marine Corps will have the means to train jointly, educate, develop doctrine and tactics, formulate and assess operational plans, assess warfighting situations and define operational requirements.</p>									
<b>B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>									
COST (\$ in Millions)		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost		<b>3.137</b>		<b>0.595</b>		<b>0.000</b>			
RDT&E Articles Qty									
<p><b>JSIMS:</b> Provide technical expertise to the US Army, US Navy and US Air Force in the development of USMC specific requirements. Participate in Federate Integration Event 4 and 5 and Functional Assessment 2. Completed Version Release Milestone (VRM) 1.0 in FY03.</p>									
COST (\$ in Millions)		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost		<b>0.350</b>		<b>0.000</b>		<b>0.000</b>			
RDT&E Articles Qty									
<p><b>DVTE:</b> Transition DVTE S&amp;T prototype developed by TECOM/NAVSEA for USMC acquisition - Map prototype design functions to requirements and evaluate system operational maturity.</p>									
COST (\$ in Millions)		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost		<b>0.527</b>		<b>6.534</b>		<b>0.000</b>			
RDT&E Articles Qty									
<p><b>CLASS:</b> Map system design functions to requirements. Evaluation of system design and software for CLASS subsystems. Development of Instructor Management System and software support system. Develop highest priority database; develop Howitzer Interface Function (HIF) and Master Control Station (MCS) subsystems; complete closed-loop development. Complete development and integration of hardware and software; complete garrison and shipboard versions; complete prototype.</p>									
COST (\$ in Millions)		FY 2003		FY 2004		FY 2005			
Accomplishment/Effort Subtotal Cost		<b>3.263</b>		<b>4.150</b>		<b>3.125</b>			
RDT&E Articles Qty									
<p><b>CACCTUS:</b> Research Development Test and Evaluation (RDT&amp;E) efforts. Upgrade and enhance one site of Command Arms Staff Trainer (CAST) software.</p>									

# UNCLASSIFIED

EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			<b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
<b>RDT&amp;E, N /BA-7 Operational Sys Development</b>	<b>0206313M Marine Corps Communication Systems</b>		<b>C2315 Training Devices/Simulators</b>	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.538</b>	<b>0.996</b>	
RDT&E Articles Qty				
<b>MILES:</b> Develop and integrate ground position location into fielded MILES 2000 equipment. Integrate MK19 40 mm machine gun and other new ground weapons systems into existing MILES 2000 inventory.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.461</b>	<b>0.742</b>	
RDT&E Articles Qty				
<b>SESAMS:</b> Develop and integrate SESAMS capability into MILES 2000 to create compatibility between two systems.				
(U) Total \$	7.277	12.278	4.863	
 <b>(U) PROJECT CHANGE SUMMARY:</b>				
	<u><b>FY2003</b></u>	<u><b>FY2004</b></u>	<u><b>FY2005</b></u>	
<b>(U) FY 2004 President's Budget:</b>	<b>8.580</b>	<b>12.423</b>	<b>8.317</b>	
(U) Adjustments from the President's Budget:				
(U) Congressional/OSD Program Reductions			-3.432	
(U) Congressional Rescissions				
(U) Congressional Increases				
(U) Reprogrammings	-1.151			
(U) SBIR/STTR Transfer	-0.177			
(U) Minor Affordability Adjustment	0.025	-0.145	-0.022	
<b>(U) FY 2005 President's Budget:</b>	<b>7.277</b>	<b>12.278</b>	<b>4.863</b>	
(U) Funding: Adjustments above include JSIMS \$944K and CACCTUS \$207K reprogrammings as Cost of War bill payers.				
(U) Funding: Changes in FY05 are due to cancellation of CLASS program and \$22K affordability adjustment.				
(U) Schedule: Not Applicable.				
(U) Technical: Not Applicable.				

# UNCLASSIFIED

<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>		DATE: <b>February 2004</b>
<b>APPROPRIATION/BUDGET ACTIVITY</b>	<b>PROGRAM ELEMENT NUMBER AND NAME</b>	<b>PROJECT NUMBER AND NAME</b>
<b>RDT&amp;E, N /BA-7 Operational Sys Development</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C2315 Training Devices/Simulators</b>
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b>		
<u>Line Item No. &amp; Name</u>	<u>FY 2003</u>	<u>FY 2004</u>
<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>
<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>
<u>Total Cost</u>		
(U) PMC, BLI# 653200 Trng Dev/Sims	18.187	63.518
	24.214	18.766
	13.635	13.598
	10.998	Continuing
	Continuing	Continuing
<b>(U) Related RDT&amp;E: Not Applicable</b>		
<b>(U) D. ACQUISITION STRATEGY:</b>		
(U) <b>JSIMS</b> - Development efforts terminated on 30 Sep 03. FY04 will focus on orderly closeout of the program and inventory.		
(U) <b>CLASS</b> - Awarded R & D to Aegis Technology, July 02 (CPFF). Program Cancelled in FY04 and out.		
(U) <b>CACCTUS</b> - Competitive cost plus fixed fee contract (CPFF).		
(U) <b>MILES</b> - Competitively award Cost Plus Incentive Fee (CPIF) development contract.		
(U) <b>SESAMS</b> - Competitively award Cost Plus Incentive Fee (CPIF) development contract.		
<b>(U) E. MAJOR PERFORMERS:</b>		
Not Applicable for any programs with Training Devices/Simulators, C2315.		

Exhibit R-3 Cost Analysis							DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Development			0206313M Marine Corps Communication Systems				C2315 Training Devices/Simulators					
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Software Dev - JSIMS	RCP	SPAWAR, San Diego, CA	13.495	1.830	12/02	0.000		0.000		0.000	15.325	15.325
Software Dev - JSIMS	MIPR	CECOM, FT Monmouth, NJ	0.000	0.111	11/02	0.000		0.000		0.000	0.111	0.111
Software Dev - JSIMS	WR	SPAWAR, San Diego, CA	3.134	0.478	11/02	0.595	12/03	0.000		0.000	4.207	4.207
Product Dev - MILES	RCP	SAAB & RUAG, Sweden	0.000	0.000		0.233	01/04	0.402	12/04	Cont.	Cont.	
Product Dev - SESAMS	RCP	SIMUNITIONS, Sweden	0.000	0.000		0.187	01/04	0.296	12/04	Cont.	Cont.	
Software Dev- CACCTUS	RCP	MCSC, Quantico, VA	1.814	0.000		0.649	12/03	0.000		0.000	2.463	2.463
Software Dev- CACCTUS	TBD	MCSC, Quantico, VA	2.102	0.000		2.000	03/04	0.274	03/05	Cont.	Cont.	
Subtotal Product Dev			20.545	2.419		3.664		0.972		Cont.	Cont.	
Remarks:												
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Software Dev - JSIMS	RCP	PM TRASYS, Orlando, FL	0.000	0.614	12/02	0.000		0.000		0.000	0.614	0.614
SW Dev - Miles	RCP	SAAB & RUAG, Sweden	0.000			0.233	01/04	0.402	12/04	Cont.	Cont.	
SW Dev - SEASAMS	RCP	SIMUNITIONS, Sweden	0.000			0.187	01/04	0.297	12/04	Cont.	Cont.	
SW Dev/Sys Design -CLASS	MIPR	PEO STRI, Orlando FL	0.000	0.327	03/03	5.764	03/04	0.000		0.000	6.091	6.091
Software Devm-CACCTUS	RCP	MTS, San Diego, CA	8.853			0.646	06/04	2.851	03/05	Cont.	Cont.	
SW Dev, CACCTUS	RCP	NAWC, Orlando, FL	0.000	1.400	03/03	0.000		0.000		0.000	1.400	1.400
SW Dev, CACCTUS	MIPR	PEO STRI, Orlando FL	0.000	1.379	03/03	0.000		0.000		0.000	1.379	1.379
SW Dev, DVTE	RCP	PM TRASYS, Orlando, FL	0.000	0.280	03/03	0.000		0.000		0.000	0.280	0.280
Software Development-CACCTU	RCP	TBD	0.000			0.855	03/04	0.000		0.000	0.855	0.855
Subtotal SW Dev Support			8.853	4.000		7.685		3.550		Cont.	Cont.	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
T & E - MILES	RCP	MCSC, Quantico, VA	0.000	0.000		0.051	01/04	0.142	12/04	Cont.	Cont.	
T & E - SESAMS	RCP	MCSC, Quantico, VA	0.000	0.000		0.069	01/04	0.111	12/04	Cont.	Cont.	
Dev Test & Eval -CACCTUS	MIPR	CECOM, FT Monmouth, NJ	3.294	0.000		0.000		0.000		0.000	3.294	3.294
Subtotal Dev T&E			3.294	0.000		0.120		0.253		Cont.	Cont.	
Remarks:												

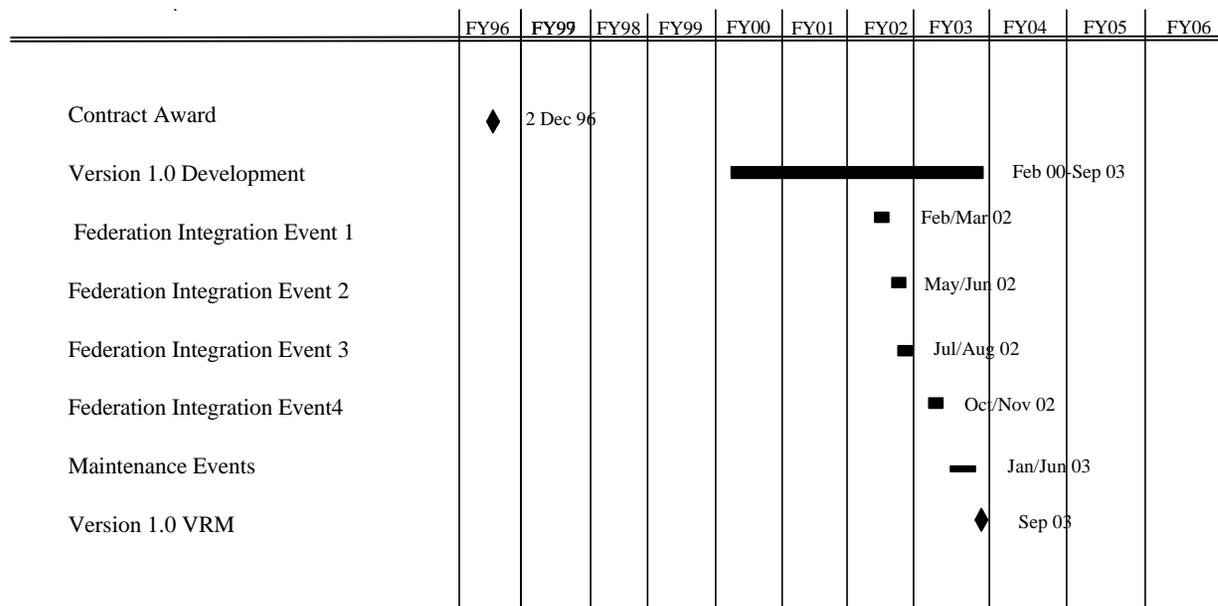
Exhibit R-3 Cost Analysis						DATE: February 2004						
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
RDT&E, N /BA 7 Operational Sys Development			0206313M Marine Corps Communication Systems				C2315 Training Devices/Simulators					
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Govt Engineering Spt-JSIMS	WR	NAWC, Orlando, FL	0.000	0.104	10/02	0.000		0.000		0.000	0.104	0.104
Program Spt - MILES	WR	MCSC, Quantico, VA	0.000			0.021	12/03	0.048	12/04	Cont.	Cont.	
Program Spt - SESAMS	WR	MCSC, Quantico, VA	0.000			0.018	12/03	0.040	12/04	Cont.	Cont.	
Govt Engineering Spt -CLASS	WR	NAWC, Orlando, FL	0.300	0.200	10/02	0.470	10/03			0.000	0.970	1.000
Contractor SW Spt-CLASS	RCP	MCSC, Quantico, VA	0.365			0.300	10/03			0.000	0.665	0.665
Contractor Engineering Suppt	WR	NAWC, Orlando, FL	0.450			0.000		0.000		0.000	0.450	0.450
Govt Engineering Suppt	WR	NAWC, Orlando, FL	1.159			0.000		0.000		0.000	1.159	1.159
Program Management Suppt	WR	NAWC, Orlando, FL	0.456			0.000		0.000		0.000	0.456	0.456
PM Spt, CACCTUS	WR	NAWC, Orlando, FL	0.000	0.484	03/03	0.000		0.000		0.000	0.484	0.484
Program Management Suppt	RCP	MCSC, Quantico, VA	1.767			0.000		0.000		0.000	1.767	1.767
PM Spt, DVTE	WR	NAWC, Orlando, FL	0.000	0.070	03/03	0.000		0.000		0.000	0.070	0.070
Subtotal Management Spt			4.497	0.858		0.809		0.088		Cont.	Cont.	
Remarks:												
Total Cost				7.277		12.278		4.863		Cont.	Cont.	

Exhibit R-4/4a Schedule Profile/Detail

DATE: February 2004

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Development	0206313M Marine Corps Communication Systems	C2315 Training Devices/Simulators

**JSIMS PROGRAM SCHEDULE**



**Other Program Funding Summary**

<u>(APPN, BLI #, NOMEN)</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>
<u>(U) RDT&amp;E,N (JSIMS)</u>	3.137	0.595	0.000	0.000	0.000	0.000	0.000	3.732
<u>(U) PMC, BLI# 653200 Trng Dev/Sims (JSIMS)</u>	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.001

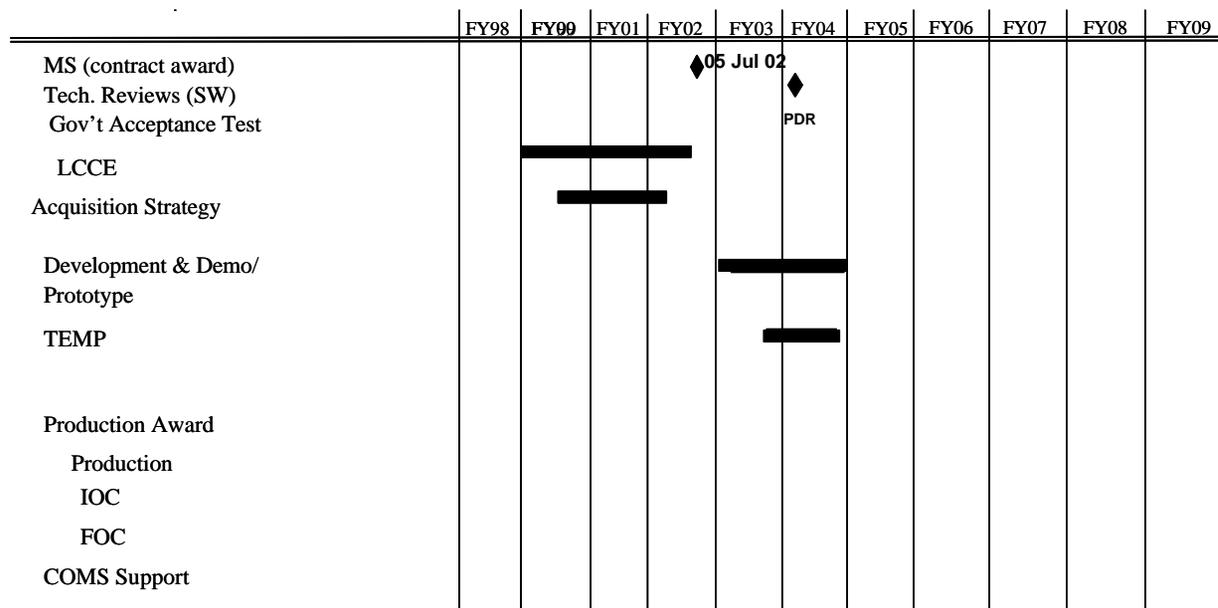


Exhibit R-4/4a Schedule Profile/Detail

DATE: February 2004

APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA 7 Operational Sys Development	0206313M Marine Corps Communication Systems	C2315 Training Devices/Simulators

**CLASS PROGRAM SCHEDULE**



**Other Program Funding Summary**

(APPN, BLI #, NOMEN)

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl
(U) RDT&E,N (CLASS)	0.527	6.534	0.000	0.000	0.000	0.000	0.000	7.061
(U) PMC, BLI# 653200 Trng Dev/Sims (CLASS)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000



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EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>February 2004</b>			
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N/BA-7 Operational Systems Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Systems</b>					PROJECT NUMBER AND NAME <b>C2510 MAGTF CSSE &amp; SE</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program
Project Cost	<b>3.215</b>	<b>22.238</b>	<b>18.034</b>	<b>10.611</b>	<b>8.123</b>	<b>8.598</b>	<b>8.633</b>	<b>Cont</b>	<b>Cont</b>
RDT&E Articles Qty									
<b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>									
<p>(U) The MAGTF Combat Service Support Element &amp; Supporting Establishment (CSSE &amp; SE) consists of mutually supporting Logistics Information Technology (IT) programs that support force deployment, planning, and execution; sustainment and distribution; and contribute to the Combatant Commander's Common Operating Picture (COP) to support rapid accurate decision making.</p> <p>1. The ATLASS PIP program funds the improvement of the existing ATLASS II+ software as well as the migration of base and station (non-deployable) USMC intermediate and consumer level supply and maintenance systems from a mainframe environment into a personal computer application using a network client-server architecture. The ATLASS PIP consolidates the total force intermediate and consumer level supply and maintenance information management functions into a single material management system. ATLASS PIP enhances ATLASS II+, retires existing mainframe legacy applications in use by the bases and stations, and improves logistic support to the operating forces. ATLASS PIP retains the flexibility to exploit existing commercial and government off-the-shelf software. This system remains compliant with the MAGTF C4I concept, GCCS COE, and published DOD standards for open systems architecture. FY03 is the last year of execution for ATLASS PIP.</p> <p>2. TCAIMS II provides the hub for the OSD mandated Joint transportation suite of systems that will provide mobility and sustainment capability to all services and bring the Marine Corps into compliance with Department of Defense Reform Initiative 54. TC-AIMS II is a Joint transportation and deployment Automated Information System (AIS) supporting the DOD mission areas of mobility and sustainment. It will replace two of our MAGTF LOG AIS applications over a parallel transition starting in FY04. TC-AIMS II will be used by Command Elements, Traffic Management Offices (TMO), and all operating forces to automate the processes of planning, organizing, coordinating, and controlling deployment, redeployment, and sustainment activities worldwide, in peace as well as during contingencies. It provides modernized, scaleable, integrated, and easily deployable AIS that support reengineered deployment and business processes throughout DOD. TC-AIMS II is the key enabler towards Force Deployment Planning and Execution. It is the source system for In-Transit-Visibility (ITV) data, which provides Combatant Commanders and Components with critical visibility of items in the transportation pipeline. TC-AIMS II links all DOD Component unit movement and Installation Transportation Office/Traffic Management Office (ITO/TMO) functionality into a single transportation management system. It is a Joint ACAT 1A(M) program, with the USMC portion being handled as an ACAT III.</p> <p>3. MAGTF CSSE&amp;SE: The CSSE Shared Data Environment is a cornerstone concept of the Integrated Logistics Capability. It will incorporate data warehousing technologies and products to provide one-stop shopping for data supporting CSSE/SE decision-making processes. It will stage CSSE/SE data and integrate decision support tools (DST) to enable command and control (C2), situational awareness, and total asset visibility at all levels of command, from the Combatant Commander to the Company Commander. The establishment of the CSSE SDE will eliminate the need for individual applications to perform these tasks for themselves and will contribute to a more cost-effective, efficient application development environment. This program, Sharded Data Environment (SDE), has moved from Project C2906, PE 0605013M, MC Information Technology in FY04 and beyond.</p> <p>4. Common Computer Resources (CCR) Marine Common Hardware Suite (MCHS) - Centralizes and standardizes management and acquisition of all Tactical common computer hardware and infrastructure by adopting the Joint Defense Information Infrastructure (DII) Common Operating Environment (COE) with consolidated Integrated Logistics Support. Ensures the environment remains in synchronization with computer hardware technology hardware improvements. The mission supports the Commandant's Planning Guidance and the Marine Corps Master Plan. Funding for this program in FY 02 and FY03 is found under Project C2277 of this PE.</p> <p>5. Global Combat Support System (GCSS)MC is the physical implementation of the enterprise information technology architecture designed to support both improved and enhanced MAGTF Combat Service Support functions and MAGTF Commander and Combatant Commander/Joint Task Force (JTF) combat support information requirements. As such, GCSS-MC is not a single system but a portfolio of information technology capabilities tied to discrete performance measures that support required combat service support mission objectives.</p>									

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EXHIBIT R-2a, RDT&E Project Justification		DATE:	
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Systems Dev</b>		<b>February 2004</b>	
PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Systems</b>		PROJECT NUMBER AND NAME <b>C2510 MAGTF CSSE &amp; SE</b>	
<p>The ILC Analysis provided the foundation for logistics transformation within the Marine Corps and established a compliance response to Defense Reform Initiative Directive (DRID) 54, directing that logistics transformation be accomplished throughout the service components. Immediately following the guidance of DRID 54, the GCSS-Capstone Requirements Document (CRD) was approved by the JROC. The GCSS CRD requires an IOC in FY04 and FOC in FY06. Specific ILC objectives are desired by 2004. GCSS-MC is the IT solution to accomplish the transformation and GCSS objectives. GCSS-MC is an integrated set of capabilities. The capabilities will be implemented within a bottoms-up (programs of record) approach within a portfolio of systems. The portfolio of systems contributes to the primary capabilities of GCSS-MC. External portfolios will also contribute secondary to GCSS-MC capabilities through integration strategies. Primary capabilities are supply chain and combat service support oriented.</p> <p>Secondary capabilities and aspects of some of the above are achieved through integration with the Manpower, Acquisition and other portfolios as well as integration with Joint and other Service systems. This integration will migrate the current Shared Data Environment (SDE), Total Force Structure Management System (TFSMS), and Automated Information Technology (AIT) to an integrated Detailed Planning and Current Operations System over the long-term. The capabilities are to be matched against systems remaining after the system realignment and categorization process and then assessed for compliance, alignment and cost effectiveness versus readily available COTS and GOTS products. The GCSS-MC portfolio seeks to most effectively achieve the mandated requirements through provisioning of the capabilities not extending specific systems.</p> <p>GCSS-MC is the IT solution for logistics transformation being developed by the ILC. The ILC Analysis was completed during an 18-week engagement beginning in late October 1998 to early February 1999. This analysis concluded with a high-level Business Case Analysis (BCA). The BCA concluded conservatively that accomplishing the ILC actions (including re-engineered IT among others) would reduce Marine Corps inventories and reduce support requirements allowing the shifting of (2000) Marines from logistics to the battlefield by 2004 (given the current timelines). ILC action will also result in: lighter, more flexible and easier to move MAGTF; Higher CSS responsiveness: reduced stocks and CSS footprint inside the MAGTF; Less equipment for Warfighter to manage; Rapidly scaleable and deployable CSS units that have worldwide inventory visibility. Access to more reliable, accurate and actionable information that clarifies the logistics situational awareness; near real time visibility of requests for products and services allowing higher confidence and trust in logistics; and the ability to operate with greater certainty.</p>			
<b>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.352</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>ATLASS PIP:</b> Subsystem/components development and concept/tech demonstration of new system concepts associated with COTS replacement.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>2.274</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>ATLASS PIP:</b> Incremental software development (EAI/APIs) and conduct software testing of replacement COTS packages.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.173</b>	<b>0.701</b>
RDT&E Articles Qty			
<b>CCR/MCHS:</b> Environmental testing of CISC/RISC workstations.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.605</b>	<b>0.580</b>
RDT&E Articles Qty			
<b>CCR/MCHS:</b> Environmental testing of CISC/RISC servers.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.299</b>	<b>0.241</b>
RDT&E Articles Qty			
<b>CCR/MCHS:</b> Technology Insertion.			

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EXHIBIT R-2a, RDT&E Project Justification			DATE: <b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
<b>RDT&amp;E, N /BA-7 Operational Systems Dev</b>	<b>0206313M Marine Corps Communications Systems</b>		<b>C2510 MAGTF CSSE &amp; SE</b>	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.046</b>	<b>0.299</b>	<b>0.300</b>	
RDT&E Articles Qty				
<b>GCSS/AIT:</b> Development of software with AIT capabilities in conjunction with the DOD AIT implementation plan.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.550</b>	<b>0.500</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Program Support for configuration control board, systems integration, data architecture, integrated process team(s), and strategic plan update.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.350</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Analysis and survey of ILC Proof-of-concept (POC) implementation.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.425</b>	<b>0.400</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Requirements determination for ILC/GCSS MC data warehouse, reference data, and information exchange repository.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.350</b>	<b>0.500</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Development of supporting systems architecture to support ILC POC.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.255</b>	<b>0.200</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Register ILC POC systems/data into Data Management and Interoperability Repository.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.550</b>	<b>0.300</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Data Analysis of data/software environment relating to ILC POC: to include GCSS MC COTS products, migration systems, and interface systems.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.325</b>	<b>0.300</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Integrate ILC POC systems/data into the Integrated Logistics Data Model.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.200</b>	<b>1.200</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Design and development of SDE ILC/GCSS MC data warehouse (complete with GCSS MC COTS interface).				

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EXHIBIT R-2a, RDT&E Project Justification			DATE:	
			<b>February 2004</b>	
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME		PROJECT NUMBER AND NAME	
<b>RDT&amp;E, N /BA-7 Operational Systems Dev</b>	<b>0206313M Marine Corps Communications Systems</b>		<b>C2510 MAGTF CSSE &amp; SE</b>	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.755</b>	<b>0.700</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Design and development of SDE ILC/GCSS MC Information Exchange repository.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.455</b>	<b>0.409</b>	
RDT&E Articles Qty				
<b>GCSS/SDE:</b> Data analysis and Cleansing of legacy data for successive implementation of GCSS MC COTS products.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.000</b>	<b>0.700</b>	
RDT&E Articles Qty				
<b>GCSS-MC Enabler/WarPortal:</b> Preparation of development and test servers and systems integration, demonstration and testing.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.900</b>	<b>0.300</b>	
RDT&E Articles Qty				
<b>GCSS-MC Enabler/WarPortal:</b> Integration services for data center build out, Operational Tests and establishment of production operations.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.100</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>GCSS-MC Enabler/WarPortal:</b> Conference room pilots and functional testbeds for product configuration and development planning.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>3.000</b>	<b>0.000</b>	
RDT&E Articles Qty				
<b>GCSS-MC Supply Chain/LSM:</b> Order Management Capability to plan, direct, monitor, and control processes related to customer orders, manufacturing orders and purchase orders.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>2.000</b>	<b>3.395</b>	
RDT&E Articles Qty				
<b>GCSS-MC Supply Chain/LSM:</b> Maintenance Management Capability, which includes all types of maintenance, repair and overhaul functions and is a core capability for replacing ATCLASS II+.				
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.079</b>	<b>0.697</b>	
RDT&E Articles Qty				
<b>GCSS-MC Supply Chain/LSM:</b> Asset Management Capability - The business functions of developing resource requirements, identifying sources of funding, determining cost, acquiring funds, distributing/controlling funds, tracking costs and obligations, cost capturing and reimbursement, and establishing management costs.				

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EXHIBIT R-2a, RDT&E Project Justification			DATE:
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 Operational Systems Dev</b>		<b>0206313M Marine Corps Communications Systems</b>	<b>C2510 MAGTF CSSE &amp; SE</b>
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.000</b>	<b>2.746</b>
RDT&E Articles Qty			<b>1.502</b>
<b>GCSS-MC Supply Chain/LSM:</b> Inventory Control and Warehouse Management - basic functions required to replace ATLASS II+.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.000</b>	<b>2.772</b>
RDT&E Articles Qty			<b>1.944</b>
<b>GCSS-MC Supply Chain/LSM:</b> Basic Service Fulfillment Capability, which is the ability to manage user requests for CSS services.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.000</b>	<b>0.500</b>
RDT&E Articles Qty			<b>0.407</b>
<b>GCSS-MC Supply Chain/LSM:</b> Data warehouse development to meet GCSS Requirements (CINC 129 from the GCSS CRD).			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			<b>0.250</b>
<b>GCSS-MC Supply Chain/LSM:</b> Logistics Forecasting/Planning Capability.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			<b>1.000</b>
<b>GCSS-MC Decision Support/CLC2S:</b> Enhancements to meet additional user and architecture requirements, and integrate with GCSS-MC portfolio.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			<b>0.301</b>
<b>GCSS-MC Decision Support/CLC2S:</b> Services to transition S&T system into institutional support.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			<b>0.120</b>
<b>GCSS/TFSMS:</b> User requested enhancements.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.277</b>	<b>0.542</b>
RDT&E Articles Qty			<b>0.000</b>
<b>TC-AIMS II:</b> Conduct operational test and evaluation of TC-AIMS II. Blocks per JTMO schedule. TC-AIMS II consists of 7 blocks, each block is individually evaluated during an IOT&E and has a separate Milestone III decision.			
COST (\$ in Millions)		FY 2003	FY 2004
Accomplishment/Effort Subtotal Cost		<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			<b>1.087</b>
<b>TC-AIMS II:</b> Conduct service specific software enhancement to TC-AIMS II to provide interface capability with USMC systems.			

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EXHIBIT R-2a, RDT&E Project Justification			DATE:						
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Systems Dev</b>			PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Systems</b>						
PROJECT NUMBER AND NAME <b>C2510 MAGTF CSSE &amp; SE</b>			DATE: <b>February 2004</b>						
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005						
Accomplishment/Effort Subtotal Cost	<b>0.266</b>	<b>0.008</b>	<b>0.000</b>						
RDT&E Articles Qty									
<b>MAGTF CSSE &amp; SE:</b> Design & development of web-enabling technologies, messaging backbone, and integration with air/ship/rail load and joint planning & execution tools. Conduct efforts to migrate legacy system data and interfaces to the Shared Data Environment.									
<b>(U) Total \$</b>	<b>3.215</b>	<b>22.238</b>	<b>18.034</b>						
<b>(U) PROJECT CHANGE SUMMARY:</b>	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>						
<b>(U) FY 2004 President's Budget:</b>	<b>4.376</b>	<b>23.488</b>	<b>18.094</b>						
(U) Adjustments from the President's Budget:									
(U) Congressional Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings	-1.062	-1.000							
(U) SBIR/STTR Transfer	-0.099								
(U) Minor Affordability Adjustments		-0.250	-0.060						
<b>(U) FY 2005 OSD Budget:</b>	<b>3.215</b>	<b>22.238</b>	<b>18.034</b>						
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: TC-AIMS II Schedule change is due to inadequate IOT&E results, during November and December 2001.									
(U) Technical: Not Applicable.									
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b>									
<u>Line Item No. &amp; Name</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
PMC BLI 464100 TC-AIMS II	4.185	0.000	0.679	0.000	0.000	0.000	0.000	0.000	4.864
PMC BLI 463000 CCR	30.720	61.062	61.989	70.980	87.812	88.869	103.734	0.000	505.166
PMC BLI 461400 GCSS	0.000	8.017	8.557	4.152	0.916	0.629	0.213	Cont.	Cont
<b>(U) Related RDT&amp;E:</b> Not Applicable.									
<b>(U) D. ACQUISITION STRATEGY:</b>									
<b>ATLASS PIP:</b> The current acquisition strategy is to stay with SSC Chesapeake, the developer for ATLASS II+ for development work.									
<b>TC-AIMS II:</b> This is a joint program with the Army (PEO STAMIS). The purchase of computers will be made by PMIT and the peripherals will be made off a standard government list. The integration of the system will be performed by Global Systems, Inc. under a SPAWAR contract. TC-AIMS II is designed using a modular concept which will incorporate related functionality within a specific block. All of the block/modules will be individually tested (DT and OT), and fielded incrementally until the complete integration in 4th Qtr FY08.									
<b>Common Computer Resources (CCR):</b> To ensure computer hardware in the operating forces keeps pace with industry computer hardware technical improvements.									

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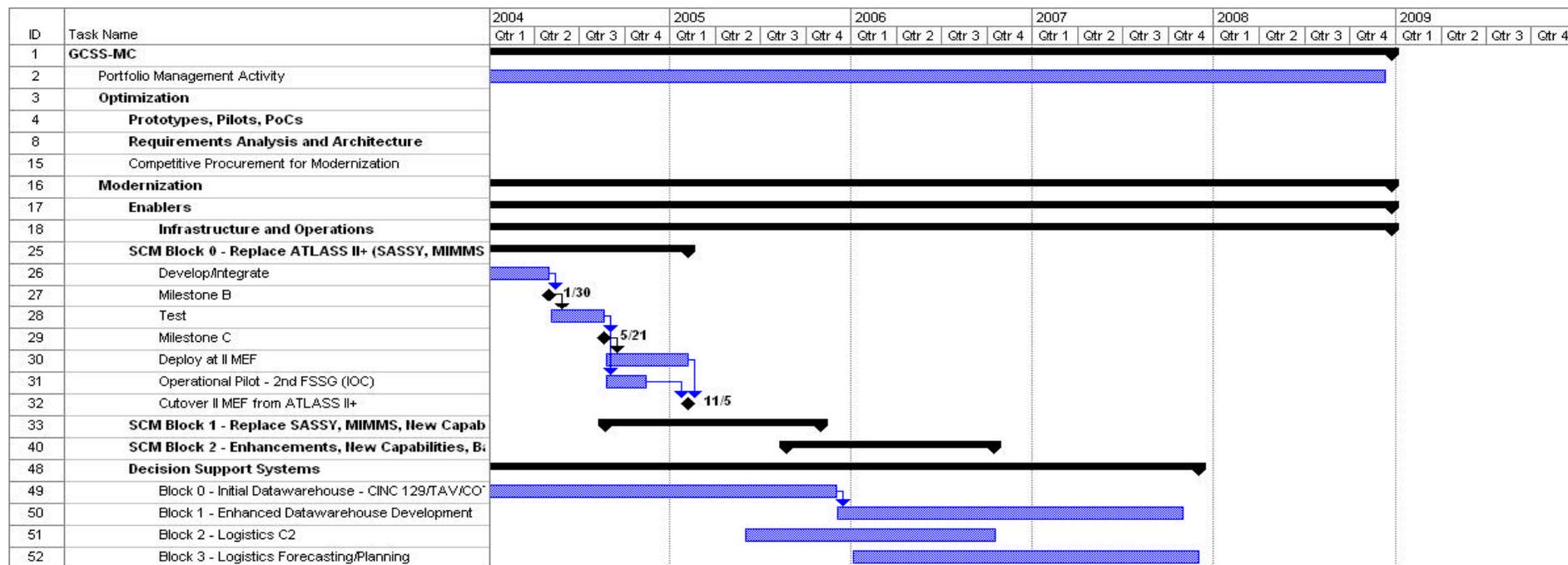
<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N /BA-7 Operational Systems Dev</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communications Systems</b>	PROJECT NUMBER AND NAME <b>C2510 MAGTF CSSE &amp; SE</b>
<p><b>GCSS-MC</b> will pursue an evolutionary acquisition (EA) strategy in order to field an operationally suitable and supportable capability in the shortest time possible. This flexible strategy compliments the overwhelming support GCSS-MC receives from the entire decision making chain. EA offers the fastest method to field this highest of EA priorities and allows for requirements to be time-phased as the users become more familiar with the fielded system strengths and weaknesses. In addition to quicker fielding, an EA approach is particularly well suited to software intensive programs and offers these benefits: rapidly delivers an initial capability with the explicit intent of delivering continuously improved capability in the future and reduces "cycle time" from identification of emergent user requirements, priorities and fielding. EA ensures that systems are not technologically obsolete before fielding and that money is spent only on prioritized user requirements.</p> <p>The GCSS-MC acquisition strategy is divided into two phases: optimization and modernization. The optimization phase, begun in FY01, will run through FY02, consists of planning, concept validation, operational architecture development, modeling, and Portal demonstrations. There are (2) initiatives, Autonomic Logistics (AL) and Logistics Command and Control (LC2), currently in the ACTD phase managed by ONR. The intent is to rapidly transition these advanced technology demonstrations into the GCSS Portfolio of systems, e.g., WebPortal, Joint Force Requirements Generator II (JFRG II), Common Logistics Command and Control System (CLC2S), beginning in FY04. The modernization phase begins at milestone C, is planned for FY03-FY09, and after initial fielding, will consist of a repetitive cycle of software improvement based on user feedback, testing, training, installation and fielding of subsequent block upgrades. Minor software upgrades will be released on a six month cycle. More substantial software improvement/system upgrade blocks will be fielded annually, as required and will include in addition to emergent user priorities, advanced technology improvements and expanded functionality. Preliminary asses</p> <p>SRAC validation activities and recommendations, and Portal demonstrations. Tentative milestone dates are for MS B during the 1st quarter FY03 and MS C during the 4th quarter FY04, with fielding to begin in the latter part of FY04 with continued block upgrades thereafter. IOC is initially planned to be Portal capabilities, to include divesture of ATLASS I. FOC is validated when all Marine Corps ground components are using capabilities provided by GCSS-MC to include formal schools, and selected Marine Reserve Components. Exact milestone dates and criteria for IOC and FOC will be negotiated with the MDA as the acquisition strategy evolves.</p> <p><b>(U) E. MAJOR PERFORMERS:</b></p> <p><b>ATLASS PIP</b> FY03 - Stanley Associates, EV software (COTS) development and testing.</p> <p><b>TC-AIM II</b> FY03 - NWSC, Crane, IN, Conduct IOT&amp;E - supporting MCOTEA. Support includes scenario development, test support, data reduction, input to test requirements, Nov 2002 FY04 - NWSC, Crane, IN, Conduct IOT&amp;E - supporting MCOTEA. Support includes scenario development, test support, data reduction, input to test requirements, Nov 2003 FY05 - Contracting information is not available at this time; to be determined.</p> <p><b>MAGTF CSSE &amp; SE</b> FY03 - Stanley Associates, Provide technical and functional expertise to develop the functionality in the GCSS MC Expanded Validation Oracle 11i Environment</p> <p><b>CCR/MCHS</b> FY04 - NWSC, Crane, IN, Environment testing of servers and workstations, March 2004. FY05 - NWSC, Crane, IN, Inserting new technology into servers and workstations, Jan 2005.</p> <p><b>GCSS</b> FY04 - This is a new start program. Contracting information will be determined at a later date. FY05 - Contracting information will be determined at a later date.</p>		

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Exhibit R-3 Cost Analysis							DATE: <b>February 2004</b>					
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT				PROJECT NUMBER AND NAME					
<b>RDT&amp;E, N /BA-7 Operational Sys Dev</b>			<b>0206313M Marine Corps Communications Systems</b>				<b>C2510 MAGTF CSSE S&amp;E</b>					
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ATLASS PIP	WR	SSC Chesapeake	2.093							Cont.	Cont.	
ATLASS PIP	RCP	MCSC, Quantico, VA	2.709	0.142	02/03					Cont.	Cont.	
ATLASS PIP	RCP	MCSC, Quantico, VA		2.132	04/03					Cont.	Cont.	
TC-AIMS II	C/FFP	MCSC, Quantico, VA	0.000					1.087	01/05	Cont.	Cont.	
MAGTF CSSE & SE	C/FFP	Various	0.726	0.266	04/03	0.008	01/04			Cont.	Cont.	
CCR/MCHS	WR	NSWC, Crane, Indiana	0.000	0.000		0.904	01/04	0.821	01/05	Cont.	Cont.	
GCSS LSM	TBD	TBD	0.000			12.097	01/04	7.195	01/05	Cont.	Cont.	
GCSS Warfighter Portal	TBD	TBD	0.000			2.000	01/04	1.000	01/05	Cont.	Cont.	
GCSS CLC2S	TBD	TBD	0.000					1.301	01/05	Cont.	Cont.	
GCSS/SDE	TBD	Various				3.405	04/04	3.800	04/05	Cont.	Cont.	
GCSS/TFSMS	TBD	TBD						0.120	01/05	Cont.	Cont.	
<b>Subtotal Product Dev</b>			<b>5.528</b>	<b>2.540</b>		<b>18.414</b>		<b>15.324</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
GCSS/SDE	TBD	Various				1.810	01/04	1.709	01/05	0.000	3.519	
GCSS/ AIT	TBD	TBD		0.046	02/03	0.299	01/04	0.300	01/05	0.000	0.645	
<b>Subtotal Support</b>			<b>0.000</b>	<b>0.046</b>		<b>2.109</b>		<b>2.009</b>			<b>4.164</b>	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
CCR/MCHS	WR	NSWC, Crane Indiana	0.000	0.000		1.173	03/04	0.701	03/05	Cont.	Cont.	
TC-AIMS II	WR	NSWC, Crane, Indiana	0.216	0.207	12/02	0.442	11/03			0.000	0.865	
TC-AIMS II	MIPR	CECOM	0.063	0.070	11/02	0.100	11/03			0.000	0.233	
TC-AIMS II	WR	NSWC, Crane, Indiana	0.584							0.000	0.584	
<b>Subtotal T&amp;E</b>			<b>0.863</b>	<b>0.277</b>		<b>1.715</b>		<b>0.701</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
ATLASS PIP	WR	MCSC, QUANTICO, VA	0.063	0.352	02/03					0.000	0.415	
<b>Subtotal Management</b>			<b>0.063</b>	<b>0.352</b>		<b>0.000</b>		<b>0.000</b>		<b>0.000</b>	<b>0.415</b>	
Remarks:												
<b>Total Cost</b>				<b>3.215</b>		<b>22.238</b>		<b>18.034</b>		<b>Cont.</b>	<b>Cont.</b>	

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<b>Exhibit R-4-4a Project Schedule/Detail</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 OPERATIONAL SYS DEV</b>	<b>0206313M Marine Corps Communications Systems</b>	<b>C2510 GCSS-MC Modernization</b>



**Program Funding Summary**  
**(APPN, BLI #, NOMEN)**

	<b>FY 2003</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>To Compl</b>	<b>Total Cost</b>
(U) RDT&E,N	0.000	19.611	15.436	8.498	6.183	6.386	6.524	Continuing	Continuing
(U) PMC BLI# 461400	0.000	8.017	8.557	4.152	0.916	0.629	0.213	Continuing	Continuing

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<b>Exhibit R-4-4a Project Schedule/Detail</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 OPERATIONAL SYS DEV</b>	<b>0206313M Marine Corps Communications Systems</b>	<b>C2510 GCSS-MC Modernization</b>

GCSS-MC (Modernization: SCM, Data warehouse, Log C2)	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
SCM Block 0 - Replace ATLASS II+								
Develop/Integrate			2nd Qtr					
Milestone B			2nd Qtr					
Test			2nd Qtr					
Milestone C			3rd Qtr					
Deploy at II MEF			3rd Qtr +++	+++++				
Operational Pilot - 2nd FSSG (IOC)			3rd Qtr +++	+++++				
Cutover II MEF from ATLASS II+				1st Qtr				
SCM Block 1 - Replace SASSY, MIMMS at I MEF, New Capabilities and Enhancements			3rd Qtr +++	++++				
SCM Block 2 - Enhancements, New Capabilities All MEFs, Bases, Posts and Stations				3rd Qtr +++	+++++++			
Decision Support Systems								
Block 0 - Initial Datawarehouse - CINC 129/TAV/COTS			1st Qtr	+++++				
Block 1 - Enhanced Datawarehouse Development				4th Qtr	+++++			
Block 2 - Logistics C2				2nd Qtr	+++++			
Block 3 - Logistics Forecasting/Planning				1st Qtr	+++++			

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EXHIBIT R-2a, RDT&E Project Justification						DATE: <b>February 2004</b>																																																																			
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME					PROJECT NUMBER AND NAME																																																																			
<b>RDT&amp;E, N /BA-7 OPERATIONAL SYS DEV</b>	<b>0206313M Marine Corps Communication Systems</b>					<b>C3099 RADAR SYSTEMS</b>																																																																			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	Cost to Complete	Total Program																																																																
Project Cost	<b>0.000</b>	<b>20.141</b>	<b>51.552</b>	<b>48.008</b>	<b>38.842</b>	<b>6.099</b>	<b>5.076</b>	<b>Cont</b>	<b>Cont</b>																																																																
RDT&E Articles Qty																																																																									
<b>(U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION:</b>																																																																									
<p>1. The Aviation Radar (AN/TPS-59) is a "congressionally mandated" national asset. It is the only fielded ground-based sensor which can detect and track Air Breathing Targets (ABT) within 300 nautical miles, as well as Theater Ballistic Missiles (TBM) at ranges of 400 nautical miles for 360 degrees up to one million feet in elevation. Highly Expeditionary Long Range Air Surveillance Radar (HELRSR) is the modernization initiative to replace the AN-TPS 59 Radar. FY02 and FY03 funding are in Project C2273.</p> <p>2. The Ground Weapons Locating Radar (GWLR) is an expeditionary radar that can acquire threat indirect fire systems including mortars, artillery, rocket and missile systems. The principle functions of the system will be to detect, track, classify and accurately determine the origin of enemy weapons platforms. The GWLR will also be capable of registering and adjusting friendly indirect fire while simultaneously maintaining hostile surveillance.</p> <p>3. The Multi-Role Radar System (MRRS) will provide lightweight, expeditionary, three-dimensional radar capable of detecting Cruise Missiles (CMs), fixed and rotary winged aircraft, Unmanned Aerial Vehicles (UAVs), and will also provide an enhanced Combat Identification (CID) capability. The system will augment the AN/TPS-59(V)3 sensor coverage and will be integrated into the Navy's Cooperative Engagement Capability (CEC) and the Marine Corps Composite Tracking Network (CTN). Additionally, the system shall provide Air Traffic Control with real time surveillance coverage of all air activity within the assigned area of responsibility and will support the situational awareness and cueing for Stinger, Avenger, and CLAWS.</p> <p>4. The Short/Medium Range Air Defense Radar will develop engineering change proposals related to improved system performance with the specific purpose of meeting increased fleet operational requirements. As part of this effort, AN/TPS-63 modifications and system improvements will be researched and analyzed to determine which complement existing components to preclude an expensive USMC investment in solid-state radar technology. FY02 and FY03 funding are in Project C2278.</p>																																																																									
<b>(U) B. ACCOMPLISHMENTS/PLANNED PROGRAM:</b>																																																																									
<table border="1"> <thead> <tr> <th>COST (\$ in Millions)</th> <th>FY 2003</th> <th>FY 2004</th> <th>FY 2005</th> </tr> </thead> <tbody> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="right"><b>0.000</b></td> <td align="right"><b>4.628</b></td> <td align="right"><b>4.653</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4"><b>AN/TPS-59 (Sustainment):</b> Develop ECPs for software improvements and DMS issues.</td> </tr> <tr> <td>COST (\$ in Millions)</td> <td>FY 2003</td> <td>FY 2004</td> <td>FY 2005</td> </tr> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="right"><b>0.000</b></td> <td align="right"><b>1.286</b></td> <td align="right"><b>0.549</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4"><b>AN/TPS-59 (Sustainment):</b> Contractor service support.</td> </tr> <tr> <td>COST (\$ in Millions)</td> <td>FY 2003</td> <td>FY 2004</td> <td>FY 2005</td> </tr> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="right"><b>0.000</b></td> <td align="right"><b>2.110</b></td> <td align="right"><b>0.000</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4"><b>HELRSR (Modernization):</b> Develop an acquisition strategy for modernization initiative.</td> </tr> <tr> <td>COST (\$ in Millions)</td> <td>FY 2003</td> <td>FY 2004</td> <td>FY 2005</td> </tr> <tr> <td>Accomplishment/Effort Subtotal Cost</td> <td align="right"><b>0.000</b></td> <td align="right"><b>0.050</b></td> <td align="right"><b>0.000</b></td> </tr> <tr> <td>RDT&amp;E Articles Qty</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="4"><b>HELRSR (Modernization):</b> Develop an Acquisition Program Baseline (APB) for modernization initiative.</td> </tr> </tbody> </table>										COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>4.628</b>	<b>4.653</b>	RDT&E Articles Qty				<b>AN/TPS-59 (Sustainment):</b> Develop ECPs for software improvements and DMS issues.				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.286</b>	<b>0.549</b>	RDT&E Articles Qty				<b>AN/TPS-59 (Sustainment):</b> Contractor service support.				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>2.110</b>	<b>0.000</b>	RDT&E Articles Qty				<b>HELRSR (Modernization):</b> Develop an acquisition strategy for modernization initiative.				COST (\$ in Millions)	FY 2003	FY 2004	FY 2005	Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.050</b>	<b>0.000</b>	RDT&E Articles Qty				<b>HELRSR (Modernization):</b> Develop an Acquisition Program Baseline (APB) for modernization initiative.			
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EXHIBIT R-2a, RDT&E Project Justification			DATE:
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N/BA-7 OPERATIONAL SYS DEV</b>			PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communication Systems</b>
PROJECT NUMBER AND NAME <b>C3099 RADAR SYSTEMS</b>			<b>February 2004</b>
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.150</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>HELRSR (Modernization):</b> Develop a System Safety Authorization Agreement (SSAA) for modernization initiative.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.438</b>	<b>0.982</b>
RDT&E Articles Qty			
<b>HELRSR (Modernization):</b> In-house program management/government expense for modernization initiative.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.300</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>HELRSR (Modernization):</b> Conduct a System Threat Assessment for modernization initiative.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.150</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>HELRSR (Modernization):</b> Develop a Test & Evaluation Master Plan (TEMP) for modernization initiative.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.750</b>	<b>0.250</b>
RDT&E Articles Qty			
<b>HELRSR (Modernization):</b> Request for Proposal (RFP) development for modernization initiative.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.566</b>	<b>0.441</b>
RDT&E Articles Qty			
<b>HELRSR (Modernization):</b> Contractor service support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>9.800</b>
RDT&E Articles Qty			
<b>HELRSR (Modernization):</b> System development and demonstration for modernization initiative.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>AN/TPS-59: Efforts funded in FY02 and FY03 under Project C2273 of this PE.</b> Demonstrate potential antenna technology/slotted waveguide antenna (FY02 \$5.907); Develop Engineering Change Proposal (ECP) to incorporate electronic protection (FY02 \$1.612); Develop ECP to incorporate new transmitters for the antenna (FY02 \$1.500); ECP false alarm adaption software (FY02 \$1.098); Develop ECP for software and hardware improvements (FY03 \$1.915); Develop AFAR Software (FY03 \$1.500); Investigate Advanced Technologies (FY03 \$2.100) .			

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EXHIBIT R-2a, RDT&E Project Justification			DATE:
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N/BA-7 OPERATIONAL SYS DEV</b>		<b>0206313M Marine Corps Communication Systems</b>	<b>C3099 RADAR SYSTEMS</b>
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>CWAR: Efforts funded in FY02 and FY03 under Project C2278 of this PE.</b> Developmental Test and Evaluation( FY02 \$0.121) and (FY03 \$0.211); Development of Engineer Design Model (FY02 \$0.124); Program management support (FY02 \$0.025).			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.325</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>GWLR:</b> Refinement of ORD, Acquisition Strategy, Acquisition Baseline Agreement, and Life Cycle Cost Estimate.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>1.169</b>	<b>1.600</b>
RDT&E Articles Qty			
<b>GWLR:</b> Test and evaluation of Marine Corps equipment configuration of the AN/TPQ-47.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.188</b>	<b>0.201</b>
RDT&E Articles Qty			
<b>GWLR:</b> Program management support.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.272</b>
RDT&E Articles Qty			
<b>GWLR:</b> Development of Configuration Management Plan and ILS Plan.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>3.764</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Developmental test and evaluation/risk reduction. Funding (\$0.633) in FY03 for this effort is provided under Project C2278 of this PE.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.800</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Study on the reliability of the fourth mission area - counter battery. Funding (\$198K) in FY03 for this effort is provided under Project C2278 of this PE.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>2.170</b>	<b>0.865</b>
RDT&E Articles Qty			
<b>MRRS:</b> Program management support. Funding (\$0.917) in FY03 for this effort is provided under Project C2278 of this PE.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.500</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Analysis of antenna alternatives, analysis of system integration solutions.			

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EXHIBIT R-2a, RDT&E Project Justification			DATE:
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 OPERATIONAL SYS DEV</b>		<b>0206313M Marine Corps Communication Systems</b>	<b>C3099 RADAR SYSTEMS</b>
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>3.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Antenna design.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>3.500</b>
RDT&E Articles Qty			
<b>MRRS:</b> Transmitter design.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>11.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Software design and development.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>4.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Hardware design and development.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>3.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Receiver/exciter design.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>4.675</b>
RDT&E Articles Qty			
<b>MRRS:</b> Developmental testing.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>2.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> System integration.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>MRRS:</b> Efforts funded in FY03 under Project C2278 of this PE. Refinement of the ORD, Campaign Level Effectiveness Analysis, Analysis of Alternatives and Life Cycle Cost Estimate (\$993K).			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.135</b>	<b>0.132</b>
RDT&E Articles Qty			
<b>SHORT/MEDIUM RANGE AIR DEFENSE RADAR:</b> Program mgmt support. Funding FY02 (\$110K) FY03 (\$110K) for this effort is found under Project C2278 of this PE.			

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EXHIBIT R-2a, RDT&E Project Justification			DATE:
APPROPRIATION/BUDGET ACTIVITY		PROGRAM ELEMENT NUMBER AND NAME	
PROJECT NUMBER AND NAME		PROJECT NUMBER AND NAME	
<b>RDT&amp;E, N /BA-7 OPERATIONAL SYS DEV</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C3099 RADAR SYSTEMS</b>	
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.337</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>SHORT/MEDIUM RANGE AIR DEFENSE RADAR:</b> Developmental Test and Evaluation of the Frequency Generator assembly.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.325</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>SHORT/MEDIUM RANGE AIR DEFENSE RADAR:</b> Engineer Design Model of the Frequency Generator assembly.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.382</b>
RDT&E Articles Qty			
<b>SHORT/MEDIUM RANGE AIR DEFENSE RADAR:</b> Developmental test and evaluation of the Low Level Power Supply assembly.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.250</b>
RDT&E Articles Qty			
<b>SHORT/MEDIUM RANGE AIR DEFENSE RADAR:</b> Engineer Design Model of the Low Level Power Supply assembly.			
COST (\$ in Millions)	FY 2003	FY 2004	FY 2005
Accomplishment/Effort Subtotal Cost	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>
RDT&E Articles Qty			
<b>SHORT/MEDIUM RANGE AIR DEFENSE RADAR:</b> Efforts funded in FY02 and FY03 under Project C2278 of this PE. Developmental Test and Evaluation/Risk Reduction (FY02 \$139K) and (FY03 \$999K); Development of Engineer Design Model (FY02 \$100K), and (FY03 \$150K); Program Management Support (FY02 \$110K) and (FY03 \$110K) .			
<b>(U) Total \$ (C3099 Radar Systems)</b>	<b>0.000</b>	<b>20.141</b>	<b>51.552</b>

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EXHIBIT R-2a, RDT&E Project Justification				DATE: February 2004					
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT NUMBER AND NAME			PROJECT NUMBER AND NAME					
RDT&E, N/BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps Communication Systems			C3099 RADAR SYSTEMS					
<b>(U) PROJECT CHANGE SUMMARY:</b>									
	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>						
<b>(U) FY 2004 President's Budget:</b>									
(U) Adjustments from the President's Budget:	0.000	19.810	57.762						
(U) Congressional/OSD Program Reductions									
(U) Congressional Rescissions									
(U) Congressional Increases									
(U) Reprogrammings		0.558							
(U) SBIR/STTR Transfer									
(U) Minor Affordability Adjustment		-0.227	-6.210						
<b>(U) FY 2005 President's Budget:</b>	<b>0.000</b>	<b>20.141</b>	<b>51.552</b>						
CHANGE SUMMARY EXPLANATION:									
(U) Funding: See Above.									
(U) Schedule: Not Applicable.									
(U) Technical: Not Applicable.									
<b>(U) C. OTHER PROGRAM FUNDING SUMMARY:</b>									
<u>Line Item No. &amp; Name</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) PMC, BLI#465100, AN/TPS-59 Sustainment	0.000	18.077	24.466	7.461	11.933	0.000	0.000	Continuing	Continuing
(U) PMC, BLI#465100, HELRASR (Modernization)	0.000	0.000	0.000	0.000	0.000	38.933	50.564	Continuing	Continuing
(U) PMC, BLI#463600, AN/TPS-59 Sustainment	8.163	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.163
(U) PMC, BLI#463600, AN/TPS-59 V3	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.000
(U) PMC, BLI#464200, Grnd Weapon Locator Radar	0.000	0.052	0.862	0.820	28.785	0.285	0.295	Continuing	Continuing
(U) PMC, BLI#462000, AN/TPQ-46/46A Upgrade	1.954	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.954
(U) PMC, BLI#464200, Multi-Role Radar System	0.000	0.000	0.000	2.058	33.104	45.654	46.900	Continuing	Continuing
(U) PMC, BLI#464000, Short/Med Range Radar	0.707	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.707
(U) PMC, BLI#464200, Short/Med Range Radar	0.000	1.569	1.421	0.526	0.436	0.443	0.448	Continuing	Continuing
<b>(U) Related RDT&amp;E:</b>									
(U) PE 0206313M (Marine Corps Communication Systems), Project C2278 and Project C2273.									

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<b>EXHIBIT R-2a, RDT&amp;E Project Justification</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N/BA-7 OPERATIONAL SYS DEV</b>	PROGRAM ELEMENT NUMBER AND NAME <b>0206313M Marine Corps Communication Systems</b>	PROJECT NUMBER AND NAME <b>C3099 RADAR SYSTEMS</b>
<p><b>(U) D. ACQUISITION STRATEGY:</b></p> <p>(U) Highly Expeditionary Long Range Air Surveillance Radar (HELRSR): The modernization initiative will encompass all 11 AN/TPS-59 radar systems within the Marine Corps inventory. Due to technological advances, evolving threats, mobility issues, changes in employment concepts (OMFTS and EMW), interface requirements imposed by developing systems (CAC2S, CEC/CTN and CLAWS) and requirements outlined in the Capstone Requirements Documents (CID, TAMD, GIG, and IDM), the AN/TPS-59(V)3 must undergo modernization. The Acquisition Strategy is based on the recommendations from the Business Case Analysis and two independent modernization studies. Beginning in FY04, the program office will start R&amp;D efforts that will incorporate the 3-D Expeditionary Long Range Radar ORD requirements into the current 11 fielded AN/TPS-59(V)3 radars. It is anticipated that this effort will require 3 years of R&amp;D with a combined DT/OT. Forecasted IOC is FY08 with FOC for 11 systems occurring in FY13.</p> <p>(U) AN/TPS-59 Radar Sustainment: The Program Office intends to address Diminishing Manufacturing Sources (DMS) issues by continuing with the Service Life Extension Program (SLEP) started in POM 02 initiative, and they will also begin R&amp;D efforts that will modernize the radar with advanced technology and performance capabilities. A Business Case Analysis (BCA) was completed which incorporated two independent obsolescence/DMS studies that identified critical components which will severely impact the system performance and readiness by FY07. Based upon the BCA, the program office intends to sustain 5 of the 11 systems. The refurbishing and sustaining of 5 systems will enable 3 active (1 per MEF), 1 supporting and 1 reserve unit to have a system with current technology, extend system life cycle and lower the radars' overall operating cost. The remaining 6 systems will transition during the modernization effort.</p> <p>(U) The Ground Weapons Locating Radar (GWLR) AN/TPQ-47 is a U.S. Army lead program. With the exception of some minor Marine Corps specific equipment configuration changes, all prototype development, testing, and system integration will be conducted by the U.S. Army. The AN/TPQ-47 radar is an interim solution to the GWLR, as the AN/TPQ-47 radar does not meet all of the requirements in the GWLR ORD. However, the maturity of the U.S. Army's AN/TPQ-47 radar program will provide a radar system that has the extended range capability needed for the MAGTF to match the range of the High Mobility Artillery Rocket System (HIMARS). Funding for PMC for FY04-FY06 will be for Life Cycle Upgrade and to procure Battery Chargers. HIMARS IOC is scheduled for FY07.</p> <p>(U) MRRS: The MRRS will build off the ONR Affordable Ground Based Radar Science and Technology program that will demonstrate advanced mobility combined with medium radar range, high resolution, and superior clutter reduction. FY04 waiting for Source Selection, FY06 PMC funding is for a long lead item.</p> <p>(U) SHORT/MEDIUM RANGE AIR DEFENSE RADAR: This effort requires R&amp;D funds to develop modifications to keep the Short/Medium Range Air Defense Radar System's electronics and hardware viable and safe, providing sustainment for the fielded system. Efforts are underway to award a sole source Engineering Services and procurement contract with the AN/TPS-63's Original Equipment Manufacturer, Northrop Grumman. The main focus of the contract will be the development and procurement of replacement sub-assemblies currently identified as containing obsolete components, as well as those assemblies experiencing reliability, maintainability and safety related issues.</p> <p><b>(U) E. MAJOR PERFORMERS:</b></p> <p>(U) Lockheed Martin Corp, Syracuse, NY. Projected to be put on contract in Jan 04 for AN/TPS-59 to develop ECPs for software improvements and DMS issues. FY05 project contract with LMC in Jan 05 to develop ECPs for software improvements and DMS issues.</p> <p>(U) Contractors TBD by competitive sourcing, projected to be put on contract in Jan 04 to support the AN/TPS-59 modernization initiative for in-house program management/government expense and system development/demonstration and to develop acquisition documentation.</p> <p>(U) Contractor TBD by competitive sourcing. Projected to be put on contract in Jan 05 to support the AN/TPS-59 modernization initiative for in-house program management/government expense and system development/demonstration. Contractors TBD by competitive sourcing.</p> <p>(U) Raytheon, El Segundo, CA. Projected to be put on contract in Jan 04 for test and evaluation of Marine Corps equipment configuration of the AN/TPQ-47 in support of GWLR.</p> <p>(U) Anteon Corp, Stafford, VA Contracted for in Jan 04 for writing and reviewing MRRS documentation and performing an AGRB evaluation.</p> <p>(U) Contractor TBD by competitive sourcing, projected to be put on contract in Mar 05 for MRRS software design and development.</p>		

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Exhibit R-3 Cost Analysis								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT				PROJECT NUMBER AND NAME				
RDT&E, N/BA-7 OPERATIONAL SYS DEV				0206313M Marine Corps Communication Systems				C3099 RADAR SYSTEMS				
Cost Categories (Tailor to WBS, or Sys/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AN/TPS-59 Sustainment	C/CPFF	Lockheed, Syracuse NY	0.000	0.000		4.628	01/04	4.653	01/05	Cont.	Cont.	
HELRSR (Modernization)	TBD	TBD	0.000	0.000		0.000		9.800	01/05	Cont.	Cont.	
HELRSR (Modernization)	TBD	TBD	0.000	0.000		3.510	11/03	0.250	11/04	Cont.	Cont.	
MRRS	MIPR	Redstone Arsenal, AL	0.000	0.000		3.764	01/04	0.000		0.000	3.764	
MRRS	RCP	Contractor TBD	0.000	0.000		0.000		3.000	01/05	Cont.	Cont.	
MRRS	RCP	Contractor TBD	0.000	0.000		0.000		3.500	01/05	Cont.	Cont.	
MRRS	RCP	Contractor TBD	0.000	0.000		0.000		11.000	03/05	Cont.	Cont.	
MRRS	RCP	Contractor TBD	0.000	0.000		0.000		4.000	01/05	Cont.	Cont.	
MRRS	RCP	Contractor TBD	0.000	0.000		0.000		3.000	01/05	Cont.	Cont.	
MRRS	RCP	Contractor TBD	0.000	0.000		0.000		2.000	01/05	Cont.	Cont.	
SHORT/MEDIUM RANGE	RCP	Northrop Grumman	0.000	0.000		0.325	03/04	0.250	03/05	Cont.	Cont.	
<b>Subtotal Product Dev</b>			<b>0.000</b>	<b>0.000</b>		<b>12.227</b>		<b>41.453</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
GWLR	WR	NSWC, Dahlgren, VA	0.000	0.000		0.047	01/04	0.051	01/05	Cont.	Cont.	
GWLR	WR	Northrop Grumman	0.000	0.000		0.141	01/04	0.150	01/05	Cont.	Cont.	
MRRS	WR	NSWC, Dahlgren, VA	0.000	0.000		0.500	01/04	0.000		0.000	0.500	
MRRS	MIPR	ONR, Arlington, VA	0.000	0.000		0.800	01/04	0.000		0.000	0.800	
SHORT/MEDIUM RANGE	WR	NSWC, Crane, IN	0.000	0.000		0.135	01/04	0.132	01/05	Cont.	Cont.	
<b>Subtotal Support</b>			<b>0.000</b>	<b>0.000</b>		<b>1.623</b>		<b>0.333</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												

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Exhibit R-3 Cost Analysis								DATE: February 2004				
APPROPRIATION/BUDGET ACTIVITY				PROGRAM ELEMENT				PROJECT NUMBER AND NAME				
<b>RDT&amp;E, N /BA-7 OPERATIONAL SYS DEV</b>				<b>0206313M Marine Corps Communication Systems</b>				<b>C3099 RADAR SYSTEMS</b>				
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
GWLR	RCP	Raytheon, El Segundo, CA	0.000	0.000		1.169	01/04	1.600	01/05	Cont.	Cont.	
MRRS	RCP	Contractor TBD	0.000	0.000		0.000		4.675	01/05	Cont.	Cont.	
SHORT/MEDIUM RANGE	RCP	Warner Robins AFB, GA	0.000	0.000		0.337	03/04	0.382	01/05	Cont.	Cont.	
<b>Subtotal T&amp;E</b>			<b>0.000</b>	<b>0.000</b>		<b>1.506</b>		<b>6.657</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 03 Cost	FY 03 Award Date	FY 04 Cost	FY 04 Award Date	FY 05 Cost	FY 05 Award Date	Cost to Complete	Total Cost	Target Value of Contract
AN/TPS-59 Sustainment	CPFF	Anteon, Stafford, VA	1.739	0.000		1.286	01/04	0.549	01/05	Cont.	Cont.	
HELRASR (Modernization)	CPFF	Anteon, Stafford, VA	0.000	0.000		0.566	01/04	0.441	01/05	Cont.	Cont.	
HELRASR (Modernization)	WR	MCSC, Quantico, VA	0.000	0.000		0.438	01/04	0.982	01/05	Cont.	Cont.	
GWLR	MIPR	GSA, Bremerton, WA	0.000	0.000		0.325	01/04	0.272	01/05	Cont.	Cont.	
MRRS	MIPR	GSA, Bremerton, WA	0.000	0.000		1.522	01/04	0.182	01/05	Cont.	Cont.	
MRRS	RCP	MCSC, Quantico, VA	0.000	0.000		0.648	01/04	0.683	01/05	Cont.	Cont.	
<b>Subtotal Management</b>			<b>1.739</b>	<b>0.000</b>		<b>4.785</b>		<b>3.109</b>		<b>Cont.</b>	<b>Cont.</b>	
Remarks:												
<b>Total Cost</b>			<b>0.000</b>	<b>0.000</b>		<b>20.141</b>		<b>51.552</b>		<b>Cont.</b>	<b>Cont.</b>	



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<b>Exhibit R-4-4a Project Schedule/Detail</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 OPERATIONAL SYS DEV</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C3099 RADAR SYSTEMS</b>

	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
<b>AN/TPS-59 Sustainment Schedule</b>	3rd Q-----			-----4th Q				
<b>HELTRASR (AN/TPS-59 Modernization) Schedule</b>								
Milestone A		2nd Q						
Concept & Technology Developmental Phase		2nd Q-----3rd Q						
Acquisition Documentation		3rd Q-----2nd Q						
Selection Process				2nd Q-3rd Q				
Milestone B				3rd Q				
System Development				3rd Q-----4th Q				
System Integration (EDM)				3rd Q-----2nd Q				
Combined DT/IOT&E					2nd Q-4th Q			
Milestone C						4th Q		
Production							1st Q-----	
IOC							4th Q	
FOC								
Program Support	3rd Q-----							

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<b>Exhibit R-4-4a Project Schedule/Detail</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
RDT&E, N /BA-7 OPERATIONAL SYS DEV	0206313M Marine Corps Communication Systems	C3099 RADAR SYSTEMS

**GROUND WEAPONS LOCATING RADAR SCHEDULE PROFILE**

**Milestone Schedule/Total Resource Summary**

	FY04	FY05	FY06	FY07	FY08	FY09	TOTAL
<b>MILESTONE B</b>	◆						
Phase B Activities	—————						
Program Docs							
System Integration							
Developmental Testing							
<b>MILESTONE C</b>			◆				
Phase C Activities			—————				
Operational Test			—				
Full Rate Production				—————			
<b>IOC</b>				◇			
<b>FOC</b>						◇	

**Program Funding Summary**

**(APPN, BLI #, NOMEN)**

	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>To Compl</u>	<u>Total Cost</u>
(U) RDT&E,N, C3099, GWLR	0.000	1.682	2.073	0.986	0.314	0.000	0.000	0.000	5.055
(U) PMC, BLI#464200, GWLR	0.000	0.052	0.862	0.820	28.785	0.285	0.295	Continuing	Continuing
(U) PMC, BLI#462000, AN/TPQ-46/46A Upgrade	1.954	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.954





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<b>Exhibit R-4-4a Project Schedule/Detail</b>		DATE: <b>February 2004</b>
APPROPRIATION/BUDGET ACTIVITY	PROGRAM ELEMENT	PROJECT NUMBER AND NAME
<b>RDT&amp;E, N /BA-7 OPERATIONAL SYS DEV</b>	<b>0206313M Marine Corps Communication Systems</b>	<b>C3099 RADAR SYSTEMS</b>

<b>MRRS SCHEDULE DETAIL</b>	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Concept & Technology Developmental Phase	-----2nd Q							
Analysis of Alternatives	3rd Q							
Acquisition Documentation	3rd Q-----2nd Q							
Selection Process			4th Q-----2nd Q					
Milestone B				2nd Q				
System Development				2nd Q-----2nd Q				
System Integration (EDM)				2nd Q-----3rd Q				
System Demonstration (DT)					3rd Q-----2nd Q			
Long Lead Items					3rd Q			
Milestone C						2nd Q		
Production						3rd Q-----		
LRIP (IOT&E)						3rd Q-4th Q		
IOC						4th Q		
Program Support						1st Q-----		